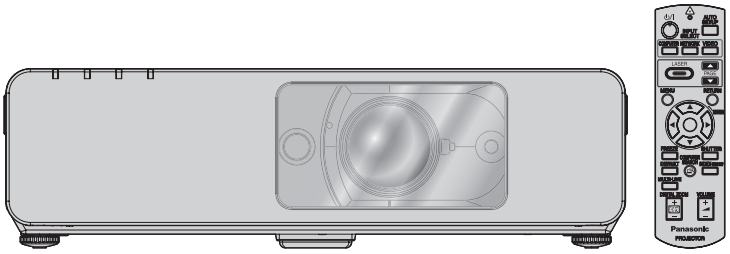
Panasonic

Operating Instructions

LCD Projector **Commercial Use**

Model No. **PT-F200NTU**
PT-F200U



Before operating this product, please read the instructions carefully and save this manual for future use.

TQBJ0248

ENGLISH

Important Safety Notice

Dear Panasonic Customer:

The following information should be read and understood as it provides details, which will enable you to operate the projector in a manner which is both safe to you and your environment, and conforms to legal requirements regarding the use of projectors. Before connecting, operating or adjusting this projector, please read these instructions completely and save this booklet with the projector for future reference. We hope it will help you to get the most out of your new product, and that you will be pleased with your Panasonic LCD projector.
The serial number of your product may be found on its bottom. You should note it in the space provided below and retain this booklet in case service is required.

Model number: **PT-F200NTU / PT-F200U**

Serial number:

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DONOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

Power Supply: This LCD Projector is designed to operate on 100 V - 240 V, 50 Hz/60 Hz AC, house current only.

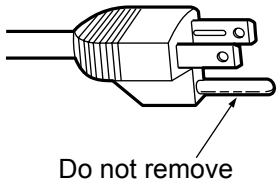
CAUTION: The AC power cord which is supplied with the projector as an accessory can only be used for power supplies up to 125 V, 7 A. If you need to use higher voltages or currents than this, you will need to obtain a separate 250 V power cord. If you use the accessory cord in such situations, fire may result.

WARNING
RISK OF ELECTRIC SHOCK. DO NOT OPEN
MISE EN GARDE-RISQUE DE CHOC ÉLECTRIQUE. NE PAS OUVRIR.
WARNUNG- ZUR VERMEIDUNG EINES ELEKTRISCHEN SCHLAGES GERÄT NICHT ÖFFNEN.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

CAUTION: This equipment is equipped with a three-pin grounding-type power plug. Do not remove the grounding pin on the power plug. This plug will only fit a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician. Do not defeat the purpose of the grounding plug.



Pursuant to at the directive 2004/108/EC, article 9(2)
Panasonic Testing Centre
Panasonic Service Europe, a division of Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, F.R. Germany

NOTICE:

- This product has a High Intensity Discharge (HID) lamp that contains mercury. Dispose may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronic Industries Alliance: http://www.eiae.org

Important Safety Notice

WARNING:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION: To assure continued compliance, use only shielded interface cables when connecting to computers or peripheral devices. Any unauthorized changes or modifications to this equipment will void the users authority to operate.
If you use serial port to connect PC for external control of projector, you must use optional RS-232C serial interface cable with ferrite core. Any unauthorized changes or modifications to this equipment will void the user's authority to operate.

FCC RF Exposure Warning: (if provided with wireless device)

- This equipment complied with FCC radiation exposure limits set forth for an uncontrolled environment.
- This equipment has been approved for mobile operation and requires minimum 20 cm spacing be provided between antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.
- This equipment may not be used with other installed transmitters, which may be capable of simultaneous transmission.

WARNING:

- Not for use in a computer room as defined in the Standard for the Protection of Electronic Computer/Data Processing Equipment, ANSI/NFPA 75.
- For permanently connected equipment, a readily accessible disconnect device shall be incorporated in the building installation wiring.
- For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.

Declaration of Conformity

Model Number:	PT-F200NTU / PT-F200U
Trade Name:	**Panasonic**
Responsible party:	Panasonic Corporation of North America
Address:	One Panasonic Way, Secaucus, New Jersey 07094
Telephone number:	(888) 411 - 1996
E-mail:	projectorsupport@us.panasonic.com

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Information on Disposal in other Countries outside the European

This symbol is only valid in the European Union.
If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Contents

Quick steps

1. Set up your projector
See “Setting up” on page 14.

2. Connect with other devices
See “Connections” on page 18.

3. Prepare the Remote control
See “Remote control” on page 11.

4. Start projecting
See “Switching the projector on/off” on page 20.

5. Adjust the image
See “Menu Navigation” on page 27.

- **When you start the projection for the first time, the minimum required setting screen for projection will be displayed.**
  See “Minimum required setting screen” on page 10.

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Precautions with regard to safety

WARNINGS

If you notice smoke, strange smells or noise coming from the projector, disconnect the power plug from the wall socket.
- Do not continue to use the projector in such cases, otherwise fire or electric shocks could result.
- Check that no more smoke is coming out, and then contact an Authorized Service Center for repairs.
- Do not attempt to repair the projector yourself, as this can be dangerous.

Do not install this projector in a place which is not strong enough to take the full weight of the projector.
- If the installation location is not strong enough, it may fall down or tip over, and severe injury or damage could result.

Installation work (such as ceiling suspension) should only be carried out by a qualified technician.
- If installation is not carried out correctly, there is the danger that injury or electric shocks may occur.
- Do not use other than an authorized ceiling mount bracket.

If foreign objects or water get inside the projector, or if the projector is dropped or the cabinet is broken, disconnect the power plug from the wall socket.
- Continued use of the projector in this condition may result in fire or electric shocks.
- Contact an Authorized Service Center for repairs.

Do not overload the wall socket.
- If the power supply is overloaded (for example, by using too many adapters), overheating may occur and fire may result.

Never attempt to modify or disassemble the projector.
- High voltages can cause fire or electric shocks.
- For any inspection, adjustment and repair work, please contact an Authorized Service Center.

Clean the power plug regularly to prevent it from becoming covered in dust.
- If dust builds up on the power plug, the resulting humidity can damage the insulation, which could result in fire. Pull the power plug out from the wall socket and wipe it with a dry cloth.
- If not using the projector for an extended period of time, pull the power plug out from the wall socket.

Do not handle the power plug with wet hands.
- Failure to observe this may result in electric shocks.

Insert the power plug securely into the wall socket.
- If the plug is not inserted correctly, electric shocks or overheating could result.
- Do not use plugs which are damaged or wall sockets which are coming loose from the wall.

Do not place the projector on top of surfaces which are unstable.
- If the projector is placed on top of a surface which is sloped or unstable, it may fall down or tip over, and injury or damage could result.

Do not place the projector into water or let it become wet.
- Failure to observe this may result in fire or electric shocks.

Do not do anything that might damage the power cord or the power plug.
- Do not damage the power cord, make any modifications to it, place it near any hot objects, bend it excessively, twist it, pull it, place heavy objects on top of it or wrap it into a bundle.
- If the power cord is used while damaged, electric shocks, short-circuits or fire may result.
- Ask an Authorized Service Center to carry out any repairs to the power cord that might be necessary.

Do not place the projector on soft materials such as carpets or sponge mats.
- Doing so may cause the projector to overheat, which can cause burns, fire or damage to the projector.

Do not place liquid containers on top of the projector.
- If water spills onto the projector or gets inside it, fire or electric shocks could result.
- If any water gets inside the projector, contact an Authorized Service Center.

Do not insert any foreign objects into the projector.
- Do not insert any metal objects or flammable objects into the projector or drop them onto the projector, as doing so can result in fire or electric shocks.

Do not allow the + and - terminals of the batteries to come into contact with metallic objects such as necklaces or hairpins.
- Failure to observe this may cause the batteries to leak, overheat, explode or catch fire.
- Store the batteries in a plastic bag and keep them away from metallic objects.

Do not touch the leaked liquid from the batteries.
- If you touch the leaked liquid, it may hurt your skin. Immediately wash away the liquid with water and seek medical advice.
- If you get the leaked liquid in your eye, it may cause blindness or damage. Never rub your eye, and immediately wash away the liquid with water and seek medical advice.

During a thunderstorm, do not touch the projector or the cable.
- Electric shocks can result.

Do not use the projector in a bath or shower.
- Fire or electric shocks can result.

Do not place your skin into the light beam while the projector is being used.
- Strong light is emitted from the projector's lens. If you place directly into this light, it can hurt or damage your skin.

Do not look into the lens while the projector is being used.
- Strong light is emitted from the projector's lens. If you look directly into this light, it can hurt and damage your eyes.
- Be especially careful not to let young children look into the lens. In addition, turn off the power and disconnect the power plug when you are away from the projector.

Do not place your hands or other objects close to the air outlet port.
- Heated air comes out of the air outlet port. Do not place your hands or face, or objects which cannot withstand heat close to this port [allow at least 50 cm (20") of space], otherwise burns or damage could result.

Replacement of the lamp is recommended to be carried out by a qualified technician.
- The lamp has high internal pressure. If improperly handled, explosion might result.
- The lamp can easily become damaged if struck against hard objects or dropped, and injury or malfunctions may result.

When replacing the lamp, allow it to cool for at least one hour before handling it.
- The lamp cover gets very hot, and touching it can cause burns.

Before replacing the lamp, be sure to disconnect the power plug from the wall socket.
- Electric shocks or explosions can result if this is not done.

Do not allow infants or pets to touch the remote control unit.
- Keep the remote control unit out of the reach of infants and pets after using it.

CAUTIONS

Do not cover the air inlet port or the air outlet port.
- Doing so may cause the projector to overheat, which can cause fire or damage to the projector.
- Do not place the projector in narrow, badly ventilated places such as closets or bookshelves.
- Do not place the projector on cloth or papers, as these materials could be drawn into the air inlet port.

Do not set up the projector in humid or dusty places or in places where the projector may come into contact with oily smoke or steam.
- Using the projector under such conditions may result in fire, electric shocks or plastic deterioration. The plastic deterioration may cause the falling down of the projector which is mounted in the ceiling.

Do not set up the projector in a high temperature environment, such as near a heater or in direct sunlight.
- Failure to observe this may result in fire, malfunction or plastic deterioration.

Do not set up the projector outdoors.
- The projector is designed for indoor use only.

When disconnecting the power cord, hold the plug, not the lead.
- If the power cord itself is pulled, the lead will become damaged, and fire, short-circuits or serious electric shocks may result.

Always disconnect all cables before moving the projector.
- Moving the projector with cables still attached can damage the cables, which could cause fire or electric shocks to occur.

Do not place any heavy objects on top of the projector.
- Failure to observe this may cause the projector to become unbalanced and fall, which could result in damage or injury.

Do not short-circuit, heat or disassemble the batteries or place them into water or fire.
- Failure to observe this may cause the batteries to overheat, leak, explode or catch fire, and burns or other injury may result.

When inserting the batteries, make sure the polarities (+ and -) are correct.
- If the batteries are inserted incorrectly, they may explode or leak, and fire, injury or contamination of the battery compartment and surrounding area may result.

Use only the specified batteries.
- If incorrect or different kind of batteries are used, they may explode or leak, and fire, injury or contamination of the battery compartment and surrounding area may result.

Precautions with regard to safety

Do not mix old and new batteries.
- If the batteries are inserted incorrectly, they may explode or leak, and fire, injury or contamination of the battery compartment and surrounding area may result.

Remove the used batteries from the remote control promptly.
- If you leave used batteries in the remote control for an extended period of time, it may cause liquid leaking, abnormal internal temperature rising or explosion.

If not using the projector for an extended period of time, disconnect the power plug from the wall socket and remove the batteries from the remote control.
- If dust builds up on the power plug, the resulting humidity may damage the insulation, which could result in fire.
- Keeping or leaving the remote control with batteries inside may cause insulation deterioration, electrical leakage or explosion which could result in fire.

Do not put your weight on this projector.
- You could fall or the projector could break, and injury may result.
- Be especially careful not to let young children stand or sit on the projector.

Disconnect the power plug from the wall socket as a safety precaution before carrying out any cleaning.
- Electric shocks can result if this is not done.

If the lamp has broken, ventilate the room immediately. Do not touch or bring your face close to the broken pieces.
- Failure to observe this may cause the user to absorb the gas which was released when the lamp broke and which contains nearly the same amount of mercury as fluorescent lamps, and the broken pieces may cause injury.
- If you believe that you have absorbed the gas or that the gas has got into your eyes or mouth, seek medical advice immediately.
- Ask your dealer about the replacement of the lamp unit and check the inside of the projector.

Ask an Authorized Service Center to clean inside the projector at least once a year.
- If dust is left to build up inside the projector without being cleaned out, it can result in fire or problems with operation.
- It is a good idea to clean the inside of the projector before the season for humid weather arrives. Ask your nearest Authorized Service Center to clean the projector when required. Please discuss with the Authorized Service Center regarding cleaning costs.

We are constantly making efforts to preserve and maintain a clean environment. Please take non repairable units back to your dealer or a recycling company.

Cautions when transporting

Do not subject the projector to excessive vibration or shocks.
- The projector lens need to be handled with care.
- Cover the lens with the lens cover when transporting the projector.

When transporting the projector, hold the body at the bottom securely.
- Do not hold the adjuster legs or the top cover to move the projector, as this may damage the projector.

Cautions when installing

Avoid setting up in places which are subject to vibration or shocks.
- The internal parts can be damaged, which may cause malfunctions or accidents.

Avoid setting up in places which are subject to sudden temperature changes, such as near an air conditioner or lighting equipment.
- The life of the lamp may be shortened or the projector may be turned off. See “TEMP indicator” on page 39.

Do not set up the projector near high-voltage power lines or near motors.
- The projector may be subject to electromagnetic interference.

If installing the projector to the ceiling, ask a qualified technician to carry out all installation work.
- You will need to purchase the separate installation kit (Model No. ET-PKF100H, ET-PKF100S). Furthermore, all installation work is should only be carried out by a qualified technician.
- See “Ceiling mount bracket safeguards” on page 42 for the **Safety cable** installation.

If using this projector at high elevations, 1 400 m - 2 700 m (4 593 - 8 858 ft), set the ALTITUDE to HIGH. See “ALTITUDE” on page 35.
- Failure to observe this may result in malfunctions or the life of the lamp or the other components may be shortened.

Cautions on use

In order to get the best picture quality

- Draw curtains or blinds over any windows and turn off any lights near the screen to prevent outside light or light from indoor lamps from shining onto the screen.

Optical components

- If you use the projector consecutively 6 hours every day, the optical components may need to be replaced in less than 1 year.

Liquid crystal panel

- Do not project the same image for long periods of time, as this may remain as an afterimage on the liquid crystal panel.
- The liquid crystal panel of the projector is built with very high precision technology to provide fine picture details. Occasionally, a few stuck pixels may appear on the screen as fixed points of blue, green or red. It is recommended to switch off the projector once and try after 1 hour later again. Please note that this does not affect the performance of your LCD.

The projector has a high pressure mercury lamp and that is characterized as follows.

- The brightness of the lamp depends on the duration of use.
- The lamp may explode or shorten the lamp life by shocks or chipping damage.
- The lamp may explode only occasionally after using the projector.
- The lamp may explode if using the projector after the instructed lamp replacement timing.
- The lamp life is depends on individual lamp characteristics, usage condition and the installation environment. Especially the consecutive use of the projector for more than 10 hours, or the frequent switching on or off may greatly affect on the lamp life.

Do not touch the surfaces of the lens or the front glass with your bare hands.

- If the surface of the lens becomes dirty from fingerprints or anything else, this will be magnified and projected onto the screen. Moreover, when not using the projector, close the **Front panel cover**.

Security

Take safety measures for use of the projector which should cover the following envisioned incidents.

- The leakage of your personal registered information.
- Dishonest operation by an untrusted third party.
- Locking out or prevent anyone else from using the projector by an untrusted third party.

Security instructions

- Change your password regularly.
- Do not use too simple password to guess.
- The Authorized Service Center will never ask you for the password.
- Do not share your password with anyone else.

Accessories

Make sure the following accessories are provided with your projector.

<table>
<tr>
<td>Remote control for
PT-F200NTU[*1] (x1)
N2QAYB000152
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<td>Remote control for
PT-F200U[*2] (x1)
N2QAYB000154
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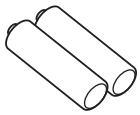
<td>AA batteries for Remote control (x2)
  </td>
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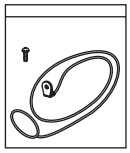
TTRA0141
Attachment screw (x1)
Safety cable (x1)
  </td>
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<td></td>
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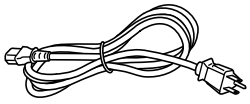
K2CG3DH0053
  </td>
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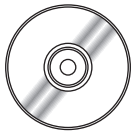
  </td>
</tr>
</table>

*1. PT-F200NTU only

*2. PT-F200U only

*3. PT-F200NTU only

* The protectors for enclosed products, such as a plug cover or foam cartons, must be treated properly.

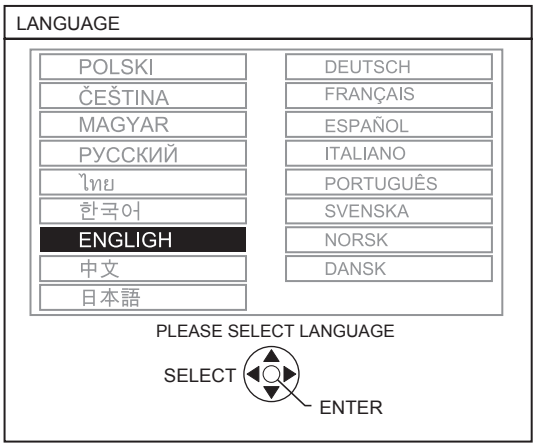
* Contact to an Authorized Service Center for lost accessories.

Minimum required setting screen

When you start the projection for the first time, the minimum required setting screen for projection will be displayed.

LANGUAGE

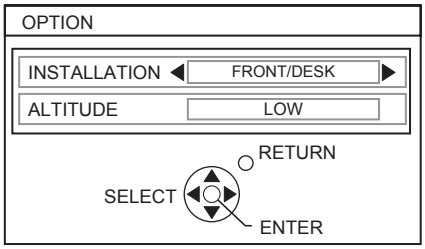
Select the required language setting.



Press ▲ ▼ ◄ ► buttons of the **Remote control** or **Control panel** on the projector to highlight the required language, and press **ENTER** to proceed to the next setting.

OPTION

Select the current projection method and fan speed setting. If you need return to the previous setting, press the **RETURTN** button.



INSTALLATION

Press ◄ ► buttons of the **Remote control** or **Control panel** on the projector to select the required installation method. Press ▼ to proceed to the **ALTITUDE** setting.

FRONT/DESK	Setting on a desk/floor and projecting from front
FRONT/CEILING	Mounting in the ceiling and projecting from front
REAR/DESK	Setting on a desk/floor and projecting from rear
REAR/CEILING	Mounting in the ceiling and projecting from rear

ALTITUDE

If you use the projector at high elevation, the **ALTITUDE** setting need to be **HIGH** to set the fan speed high. Press ◄ ► to select the required option. If you need to return to the **INSTALLATION**, press ▲.

- **LOW** The fan speed is low.
- **HIGH** The fan speed is high.

NOTE:

- At 1 400 - 2 700 m (4 593 - 8 858 ft) sea level, the setting must be **HIGH**.
- The loudness of fan noise depends on the **ALTITUDE** setting.

Press the ENTER button to start the projection.

- Once you finish the minimum requirement setting, it will not be displayed again unless the projector is initialized. See “INITIALIZE ALL” on page 36.
- You can change the settings from the **MAIN MENU**. See “Menu Navigation” on page 27.

About Your Projector

Remote control

POWER button
While the **MAIN POWER** is on, switch between stand-by mode and projection mode. (page 20)

Project a laser pointer. (page 24)

Display the **MAIN MENU**. (page 27)

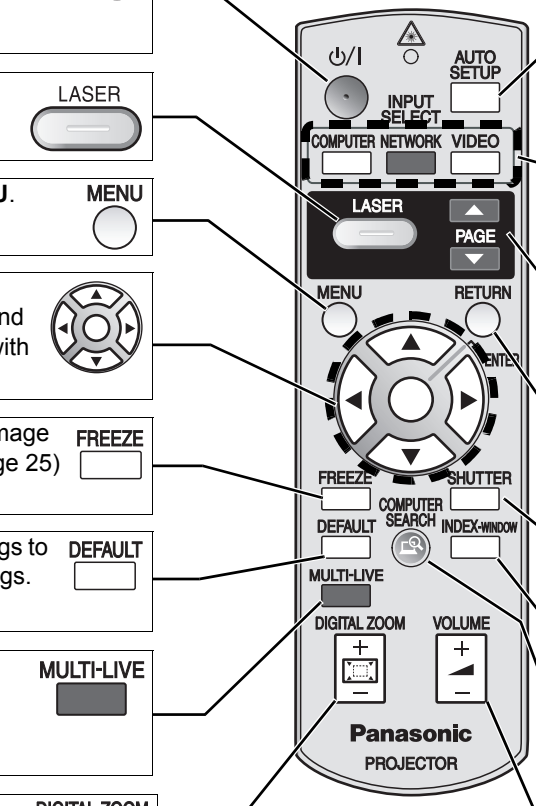
Navigate through the menus with ▲▼◀▶, and activate the menu item with **ENTER**. (page 27)

Capture the projected image as a frozen picture. (page 25)

Reset some of the settings to the factory default settings. (page 25)

- **MULTI-LIVE** is only for PT-F200NTU.
- See **CD-ROM** contents.

Control to change the scale by means of digital zoom. (page 26)



Automatically adjust the setting of **DOT CLOCK**, **CLOCK PHASE** and **SIGNAL SEARCH** for the projected image of **COMPUTER** signal. (page 23)

INPUT SELECT buttons
Switch the required input signal button to select.
- **NETWORK** button is only for PT-F200NTU.
- See **CD-ROM** contents.

- **PAGE** buttons are only for PT-F200NTU.
- See **CD-ROM** contents.

Return to the previous menu. (page 27)

Turn off the projection temporarily.

Display the frozen image while the display of subsequent images continues. (page 25)

- **COMPUTER SEARCH** button is only for PT-F200NTU.
- See **CD-ROM** contents.

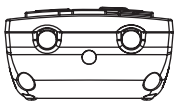
VOLUME
Control to adjust the volume of the speakers. (page 26)

Battery compartment

1. Press the tab and lift up the cover.
2. Insert the batteries according to the polarity diagram indicated inside.

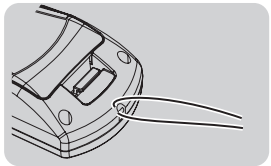
Top view

Remote control signal and Laser pointer beam emitters. (page 23)



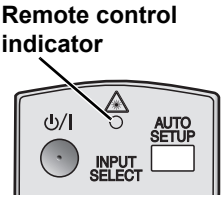
Attaching a hand strap

You can attach a favorite strap on to the **Remote control**.



Remote control indicator

If you press any button except the **LASER** button, the **Remote control indicator** will flash. If you press the **LASER** button, it will lit.

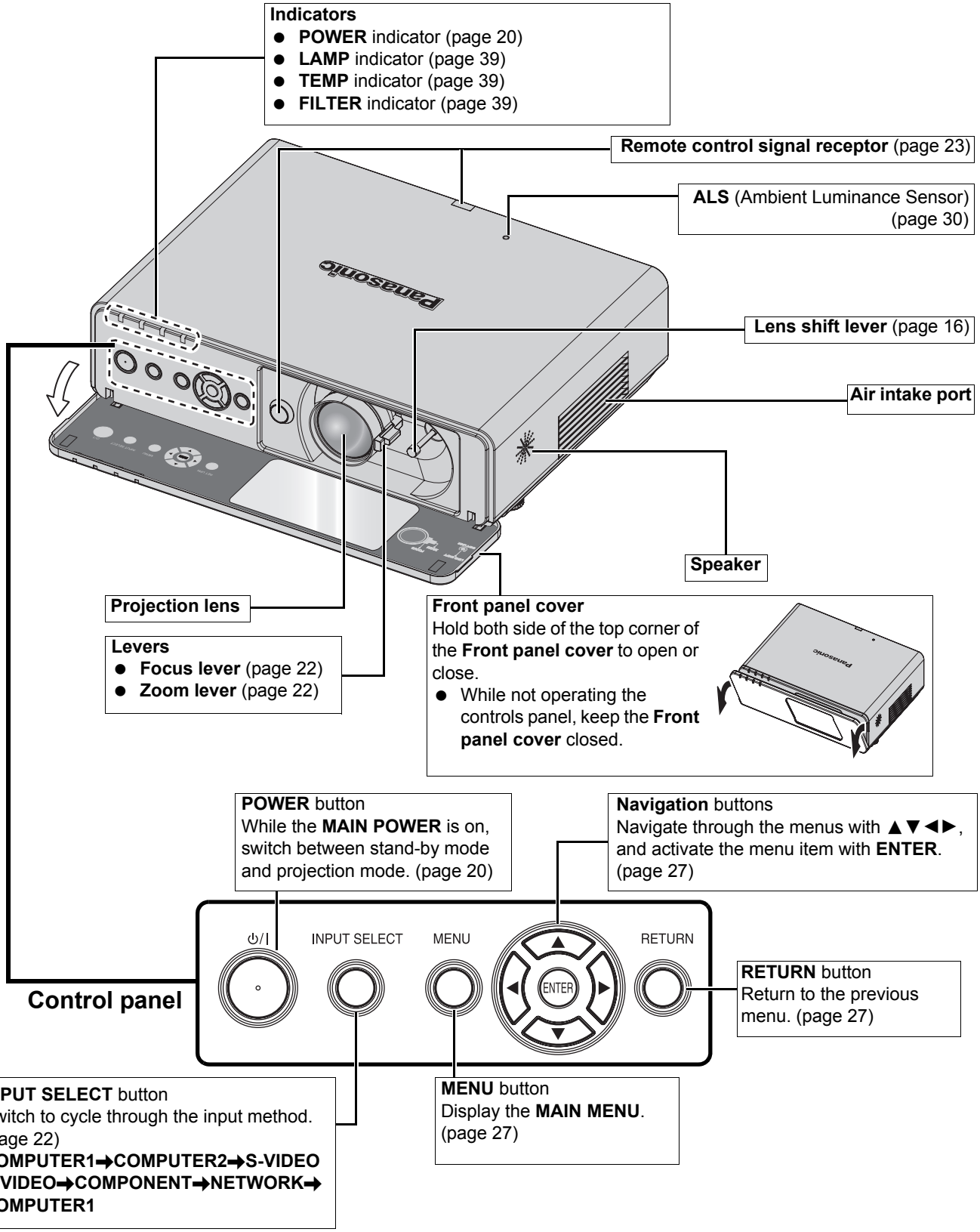


NOTE:

- Do not drop the **Remote control**.
- Avoid contact with liquids or moisture.
- Use manganese batteries or alkaline batteries with the **Remote control**.
- Do not attempt to modify or disassemble the **Remote control**. Contact an Authorized Service Center for repairs.
- Do not keep pressing the **Remote control** buttons as this may shorten battery life.
- Do not point the laser in other people's eyes or stare into beam.
- See "Remote control operation" on page 23.

Projector body

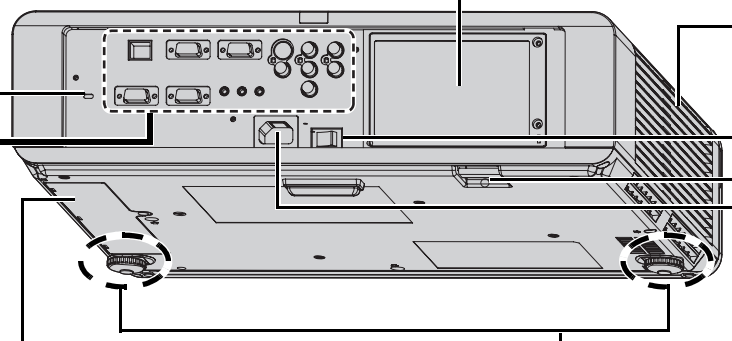
Top and front view


Indicators
● POWER indicator (page 20)
● LAMP indicator (page 39)
● TEMP indicator (page 39)
● FILTER indicator (page 39)
Remote control signal receptor (page 23)
ALS (Ambient Luminance Sensor) (page 30)
Lens shift lever (page 16)
Air intake port
Speaker
Projection lens
Levers
● Focus lever (page 22)
● Zoom lever (page 22)
Front panel cover
Hold both side of the top corner of the Front panel cover to open or close.
● While not operating the controls panel, keep the Front panel cover closed.
POWER button
While the MAIN POWER is on, switch between stand-by mode and projection mode. (page 20)
Navigation buttons
Navigate through the menus with ▲▼◄►, and activate the menu item with ENTER. (page 27)
⏻/|
INPUT SELECT
MENU
ENTER
RETURN
Control panel
RETURN button
Return to the previous menu. (page 27)
INPUT SELECT button
Switch to cycle through the input method. (page 22)
COMPUTER1➡COMPUTER2➡S-VIDEO➡VIDEO➡COMPONENT➡NETWORK➡COMPUTER1
MENU button
Display the MAIN MENU. (page 27)

NOTE:

- Do not cover the ventilation openings or place anything within 50 cm (20") of them as this may cause damage or injury.
- While the projector is not in use, keep the **FRONT PANEL COVER** closed to protect the lens.

Back and bottom view



Security lock
Attache the commercial shackle lock, manufactured by Kensington, to protect your projector. Compatible with the Kensington MicroSaver Security System.

Lamp unit compartment
(page 41)

Air exhaust port
Heated air comes out of this opening.

MAIN POWER
Switch the projector on/off. (page 21)

Burglar hook port
Attach a commercial burglar prevention cable.

AC IN
Connect the **Mains lead** to supply electronic power to the projector. (page 20)

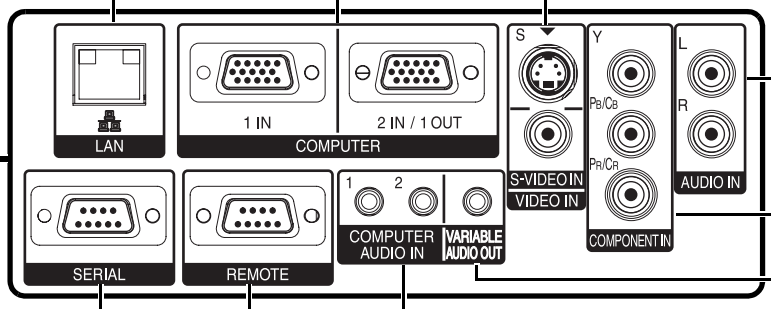
ARF (Auto Rolling Filter) compartment
(page 40)

Font leg adjusters
Screw up/down to adjust the projection angle. (page 15)

LAN
Connect a LAN cable for network connection. This terminal is PT-F200NTU only

COMPUTER1 IN
Connect an RGB signal cable from a computer.
COMPUTER2 IN/1 OUT
Connect an RGB signal cable from a computer. Selectable for input and output by menu operation.

S-VIDEO IN
Connect a S-VIDEO signal cable.
VIDEO IN
Connect an RCA composite video cable.



AUDIO IN
Connect audio cables for inputting audio signal corresponding to **VIDEO IN**, **S-VIDEO IN** and **COMPONENT IN**.

COMPONENT IN
Connect a YPBPR signal cable.

SERIAL
See “Serial terminal” on page 45.
REMOTE
See “REMOTE terminal” on page 47.

COMPUTER AUDIO IN
Connect audio cables for inputting audio signals corresponding to **COMPUTER1 IN** and/or **COMPUTER2 IN/1 OUT**.

VARIABLE AUDIO OUT
Connect an audio cables for outputting audio signals to the connected equipment.

NOTE:

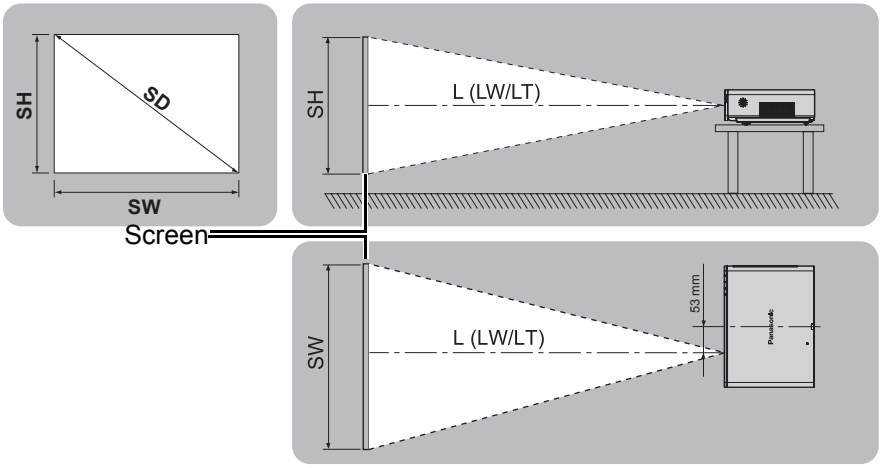
- Do not cover the ventilation openings or place anything within 50 cm (20") of them as this may cause damage or injury.
- When a cable is connected to the **VARIABLE AUDIO OUT**, the built-in speaker will be disabled.

Setting up

Screen size and throw distance

You can adjust the projection size with 2.0x zoom lens. Calculate and define the throw distance as follows.

Projected image



Projection size (4 : 3)			Throw distance (L)	
Screen diagonal (SD)	Screen height (SH)	Screen width (SW)	Minimum distance (LW)	Maximum distance (LT)
33" (0.84 m)	0.50 m (1'7")	0.67 m (2'2")		1.9 m (6'2")
40" (1.02 m)	0.61 m (2')	0.81 m (2'7")	1.2 m (3'11")	2.4 m (7'10")
50" (1.27 m)	0.76 m (2'5")	1.02 m (3'4")	1.5 m (4'11")	3.0 m (9'10")
60" (1.52 m)	0.91 m (2'11")	1.22 m (4')	1.8 m (5'10")	3.6 m (11'9")
70" (1.78 m)	1.07 m (3'06")	1.42 m (4'7")	2.1 m (6'10")	4.2 m (13'9")
80" (2.03 m)	1.22 m (4')	1.63 m (5'4")	2.4 m (7'10")	4.8 m (15'8")
90" (2.29 m)	1.37 m (4'5")	1.83 m (6')	2.7 m (8'10")	5.4 m (17'8")
100" (2.54 m)	1.52 m (4'11")	2.03 m (6'7")	3.0 m (9'10")	6.0 m (19'8")
120" (3.05 m)	1.83 m (6')	2.44 m (8')	3.6 m (11'9")	7.2 m (23'7")
150" (3.81 m)	2.29 m (7'6")	3.05 m (10')	4.5 m (14'9")	9.0 m (29'6")
200" (5.08 m)	3.05 m (10')	4.06 m (13'3")	6.0 m (19'8")	12.1 m (39'8")
250" (6.35 m)	3.81 m (12'6")	5.08 m (16'8")	7.6 m (24'11")	15.1 m (49'6")
300" (7.62 m)	4.57 m (14'11")	6.10 m (20')	9.1 m (29'10")	18.1 m (59'4")

* All measurements above are approximate and may differ slightly from the actual measurements.

Calculation methods for screen dimensions

You can calculate more detailed screen dimension from the screen diagonal.

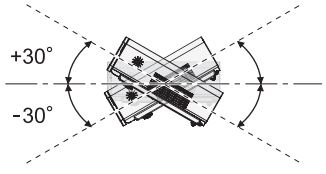
SW (m) = SD (") x 0.0203 **SH (m) = SD (") x 0.0152**

LW (m) = 0.0304 x SD (") - 0.048 **LT (m) = 0.0606 x SD (") - 0.057**

* The results above are approximate and may differ slightly from the actual measurements.

NOTE:

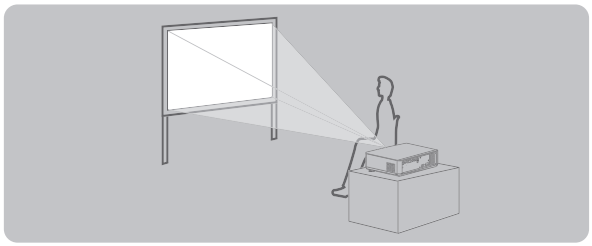
- See “Screen size and throw distance for 16:9 aspect ratio” on page 50.
- Do not use the projector at a raised or a horizontally tilted position as it may cause malfunction of the projector.
- Make sure the projector lens surface is parallel with the screen. You can tilt the projector body approximately ± 30° vertically. Overtilting may result in shortening the component’s life.
- For the best quality of the projection image, install a screen where sun light or room light does not shine directly onto the screen. Close window shades or curtains to block the lights.



Projection method

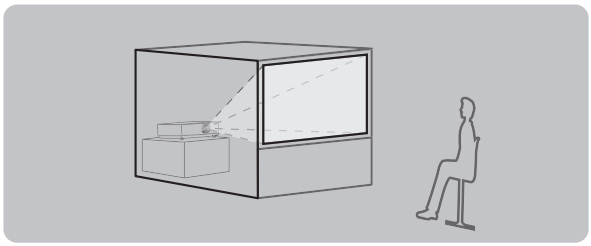
You can use the projector with any of the following 4 projection methods. To set the desired method in the projector, See “INSTALLATION” on page 35.

Setting on a desk/floor and projecting from front



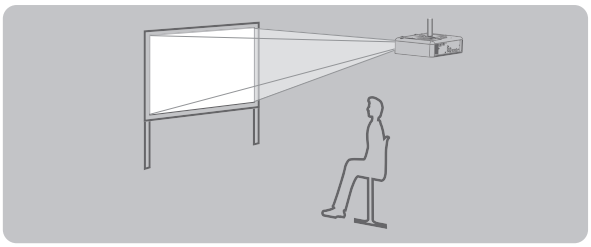
INSTALLATION: FRONT/DESK

Setting on a desk/floor and projecting from rear



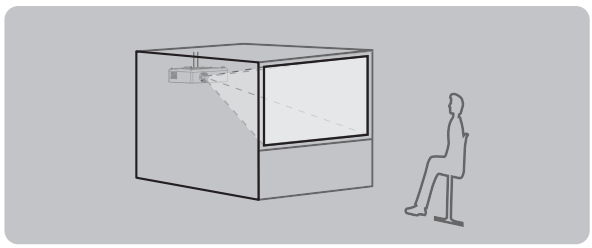
INSTALLATION: REAR/DESK

Mounting in the ceiling and projecting from front



INSTALLATION: FRONT/CEILING

Mounting in the ceiling and projecting from rear



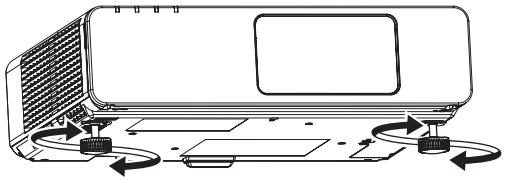
INSTALLATION: REAR/CEILING

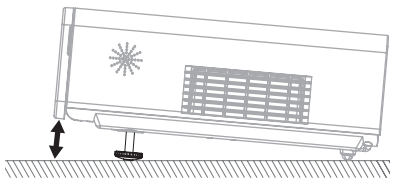
NOTE:

- A translucent screen is required for rear projection.
- When mounting the projector in the ceiling, the optional ceiling mount bracket (ET-PKF100H, ET-PKF100S) is required.
- See “Ceiling mount bracket safeguards” on page 42.

Front leg adjusters and throwing angle

You can screw up/down the front leg adjusters to control the angle of the projector for adjusting the throwing angle. See “Positioning the image” on page 22.





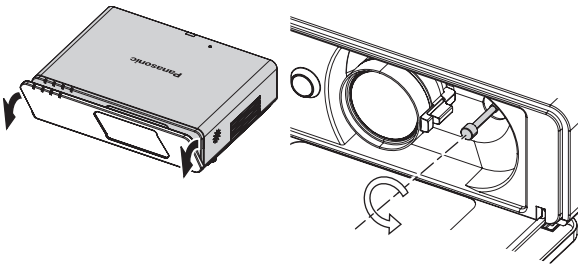
NOTE:

- Heated air comes out of the **Air exhaust port**. Do not touch the **Air exhaust port** directly.
- If keystone distortion occurs, see “KEYSTONE” on page 32.
- Screw up the adjuster legs, and an audible click will be heard as the limit.

Lens shift and positioning

If the projector is not positioned right in front of the center of the screen, you can adjust the projected image position by moving the **Lens shift lever** within the shift range of the lens.

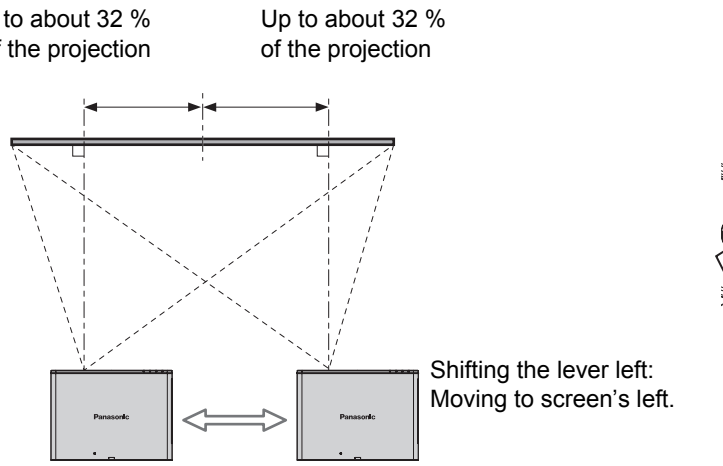
Adjusting the Lens shift lever

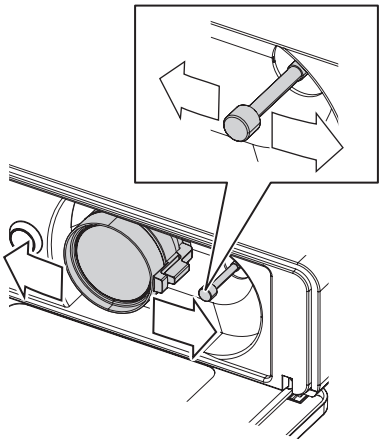


1. Open the **Front panel cover**.
2. Screw the **Lens shift lever** counterclockwise to unlock.
3. Move the **Lens shift lever** to adjust the projected image position.
4. Screw the **Lens shift lever** clockwise to lock.

Horizontal shift

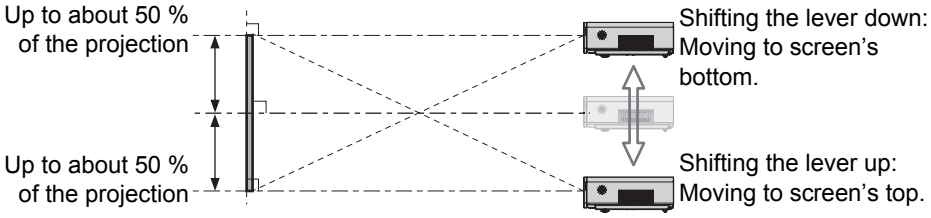
You can place the projector where the projector lens is up to 32% horizontally off-center from the screen and then adjust the image position with the **Lens shift lever**.

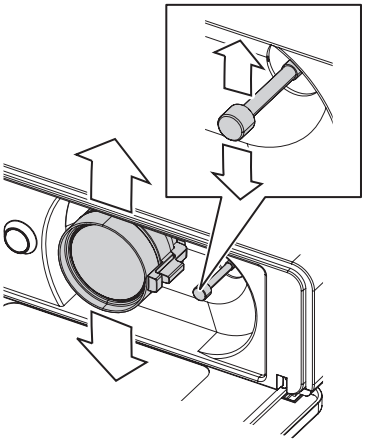

Up to about 32 % of the projection
Up to about 32 % of the projection
Shifting the lever right: Moving to screen's right.
Shifting the lever left: Moving to screen's left.



Vertical shift

You can place the projector where the projector lens is up to 50% vertically off-center from the screen and the adjust the image position with the **Lens shift lever**.

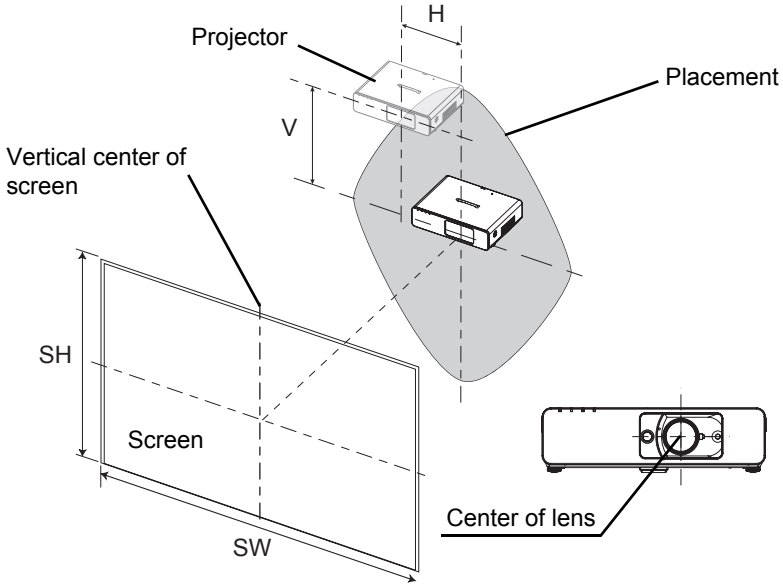

Up to about 50 % of the projection
Up to about 50 % of the projection
Shifting the lever down: Moving to screen's bottom.
Shifting the lever up: Moving to screen's top.



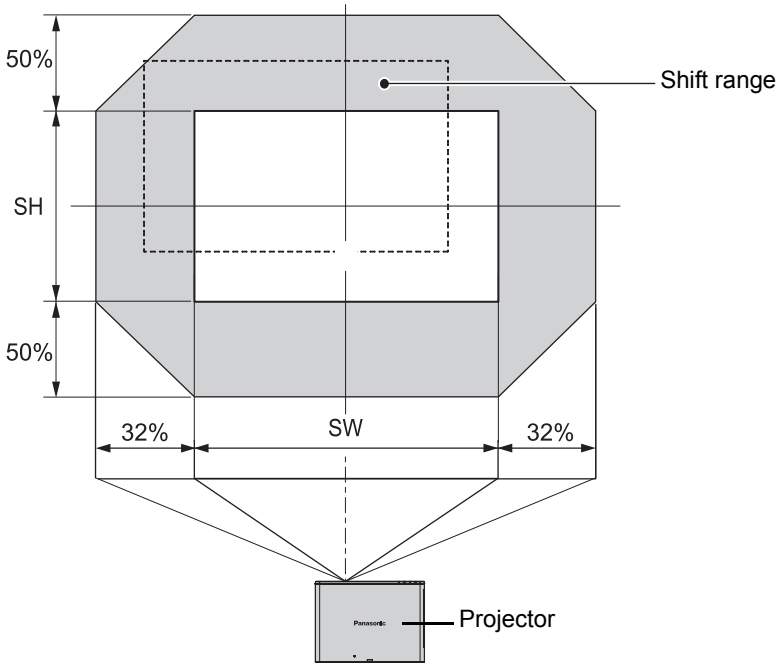
Projector location range

You can determine where to locate the screen and the projector by considering the lens shift possibilities. See “Positioning the image” on page 22.

When the screen position is fixed



When the projector position is fixed



NOTE:

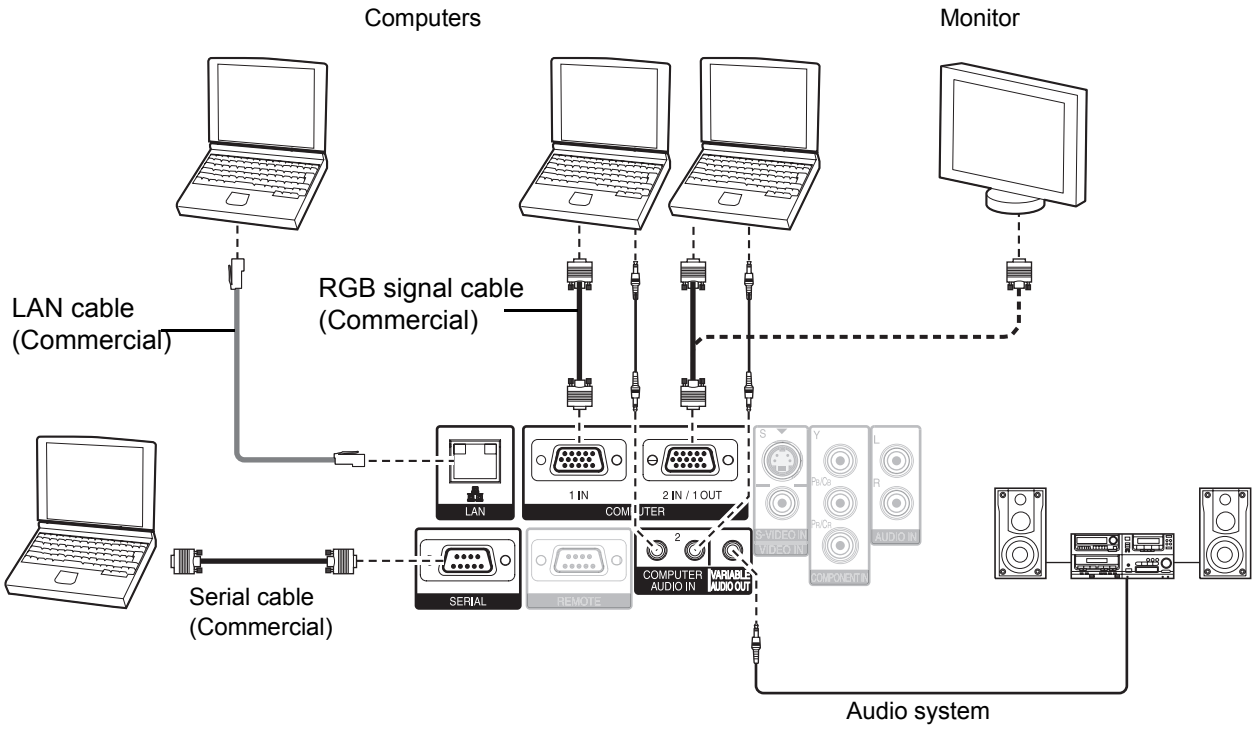
- When the projector is located right in front of the screen and the **Lens shift lever** is centered, you will get the best quality of the projection image.
- When the **Lens shift lever** is at the vertical limit of the shift range, you cannot move the lever to the horizontal limit, likewise when the **Lens shift lever** is at the horizontal limit of the shift range, you cannot move the lever to the horizontal limit.
- When the projector is tilted and you adjust **KEYSTONE**, the center of the screen and the lens need to be realigned.
- Do not attempt to pull the **Lens shift lever** hard while adjusting.

Connections

Before connection to the projector

- Read and follow the operating and connecting instructions of each peripheral device.
- The peripheral devices must be turned off.
- Use cables that match each peripheral device to be connected.
- If the input signal is affected by signal jitter, the projected image may have poor image quality and timebase correction is effective.
- Confirm the type of video signals. See “List of compatible signals” on page 44.

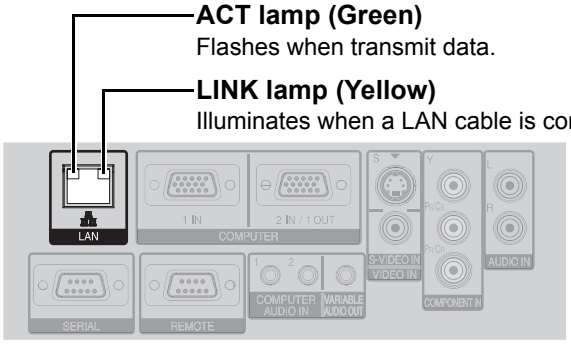
Connecting example: Computers



NOTE:
- When **COMPUTER2 SELECT** in the **OPTION** menu is set to **OUTPUT**, do not connect any input signals.
- See **CD-ROM** contents for the LAN network connection.

LAN terminal

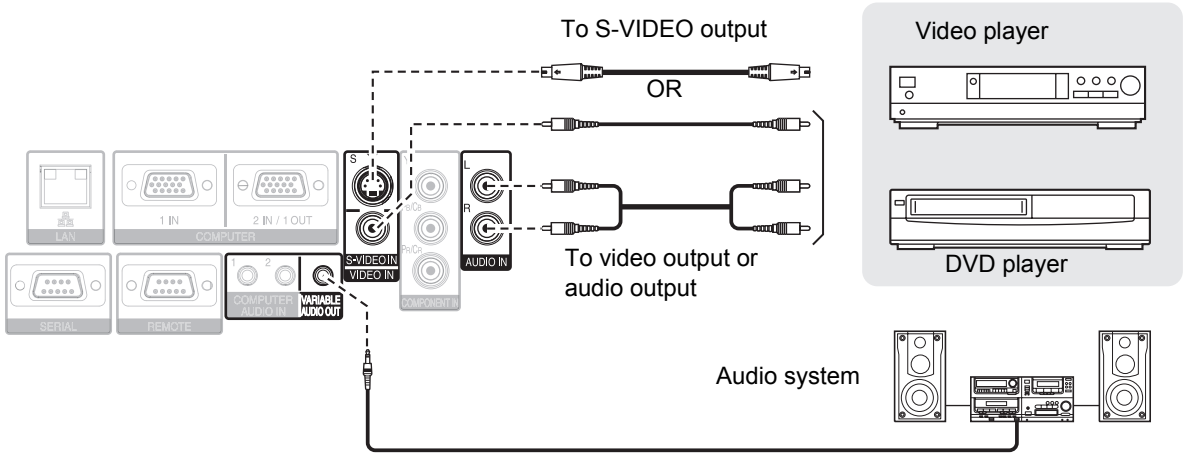
(PT-F200NTU only)



NOTE:
- Do not touch the metal parts of the **LAN** terminal. Failure to observe this may cause malfunction by static electricity.

Connecting example: AV equipments

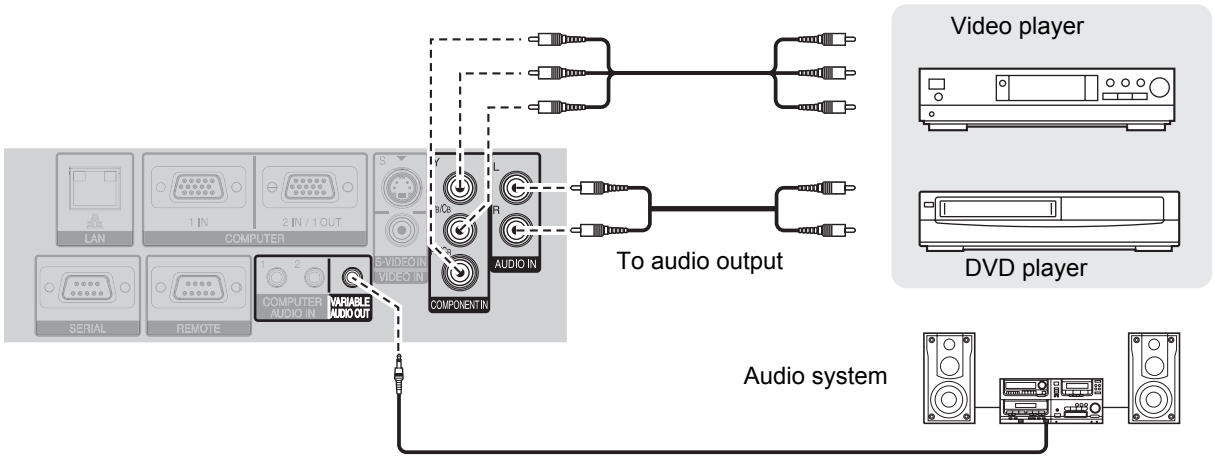
Connecting with VIDEO IN/S-VIDEO IN



NOTE:

- When you connect more than one AV equipment, switch the audio connection manually.

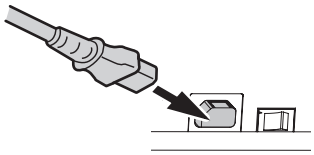
Connecting with COMPONENT IN



Switching the projector on/off

Power cord

Connecting



1. Make sure the shape of the power cord and the **AC IN** connector on the back of the projector match, then push the plug all the way in.
2. Connect the **Mains lead** to a wall socket.

Disconnecting

1. Make sure the **MAIN POWER** is switched off and unplug the **Mains lead** from the wall socket.
2. Hold the plug and unplug the **Mains lead** from the **AC IN** connector on the back of the projector.

Direct power off function

You can disconnect the **Mains lead** from the projector or switch off the **MAIN POWER** button while projecting or soon after projecting. The internal lamp cooling fan will keep operating by the internal power supply.

NOTE:

- If the projector is switched on again while the internal cooling fan is still operating by the internal power supply, it may take a while to start the projection.

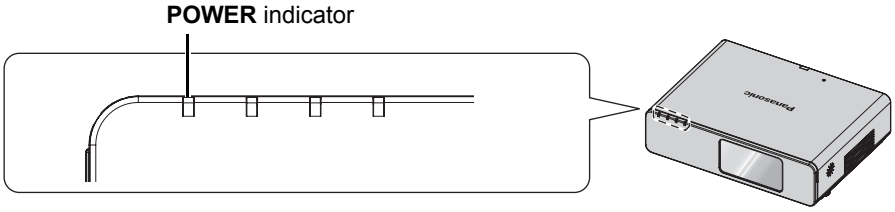
Direct power on function

If you activate the **DIRECT POWER ON**, you can start the projection only with connecting the **Mains lead** or switching on the **MAIN POWER**. See “DIRECT POWER ON” on page 35.

NOTE:

- Do not use other than a provided **Mains lead**.
- Ensure all the input devices are connected and turned off before connecting the **Mains lead**.
- Do not force the connector as this may damage the projector and/or the power cord.
- Dirt or dust build-up around plugs may cause fire or electrical hazards.
- Switch off the power to the projector when not in use.

POWER indicator

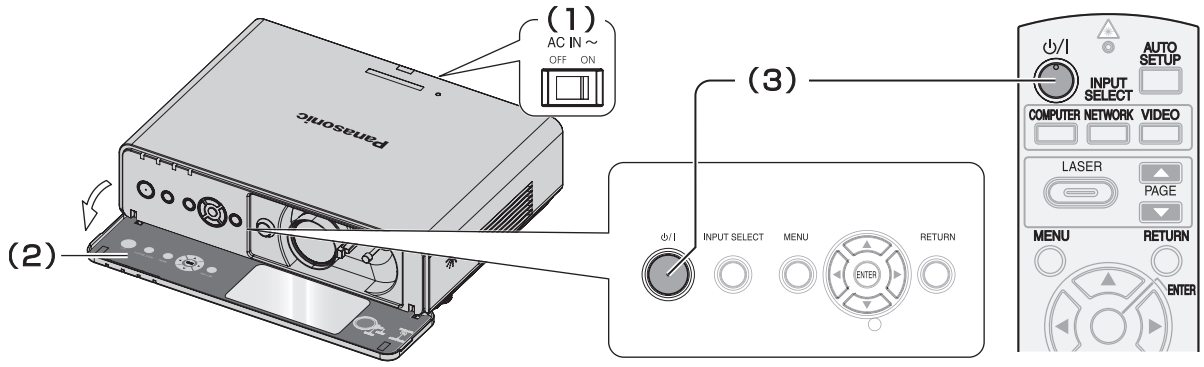


Indicator status		Status
No illumination or flashing		The **MAIN POWER** is switched off.
RED	**Lit**	The **MAIN POWER** is switched on and the projector is in standby. When the **LAMP** or **TEMP** indicator is flashing, the **POWER** indicator will not be lit.
	Flashing	Network connection is ready while the **POWER** is turned off. (PT-F200NTU only)
GREEN	**Flashing**	The **POWER** is switched on and the projector is getting ready to project.
	Lit	The projector is ready to project.
ORANGE	**Lit**	The **POWER** is switched off and the projector is cooling the lamp.
	Flashing	The **POWER** is switched on again when cooling the lamp and recovering to projection mode. Recovery may take a while.

NOTE:

- If the projector is switched on again while the internal cooling fan is still operating by the internal power supply, it may take a while to start the projection.
- The electric consumption in standby mode is 3.5 W.

Switching on the projector

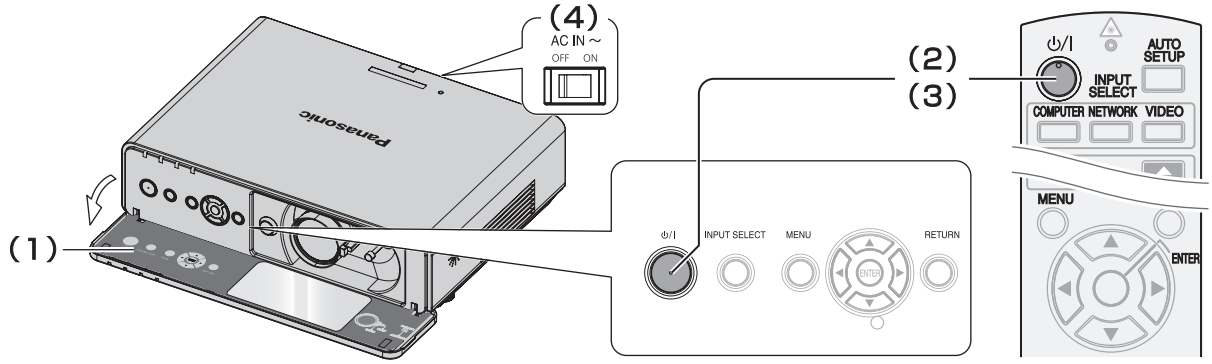


1. Switch the **MAIN POWER** on.
   - The power indicator lights up in **RED**.
2. Open the **Front panel cover**.
   - This is not necessary in **Remote control** operation.
3. Press the **POWER** button.
   - The power indicator lights up in **GREEN** after flashing for a while.
   - The **STARTUP LOGO** is displayed on the screen. See “STARTUP LOGO” on page 34.

NOTE:

- When starting up the projector, some small rattling or tinkling sound may be heard, or the display may flicker for the characteristics of the lamp. Those are normal and will not affect the performance of the projector.
- When the internal cooling fan is operating, some, operational sound may be heard. The loudness of the operational sound depends on the external temperature.
- If you disconnected the **Mains lead** or switched off the **MAIN POWER** while on projecting mode, the projection will start with connecting the **Mains lead** or switching on the **MAIN POWER**. See “DIRECT POWER ON” on page 35.

Switching off the projector



1. Open the **Front panel cover**.
   - This is not necessary in **Remote control** operation.
2. Press the **POWER** button.
   - The confirmation screen is displayed. It will disappear and return to the projection after 10 seconds without any operation.
   - To return to the projection, press any button except the **POWER** button.
3. Press the **POWER** button.
   - The power indicator lights up in **ORANGE** while cooling the lamp, then illuminates **RED** when is ready to switch off the **MAIN POWER**.
4. Switch off the **MAIN POWER** on the back of the projector.

NOTE:

- Press the **POWER** twice or for a long duration to switch the power off.
- You can disconnect the **Mains lead** or switch off the **MAIN POWER** instead of following this procedure. See “DIRECT POWER ON” on page 35.
- You can turn off the projector by pressing the **POWER** button longer than 0.5 seconds.

Projecting an image

Selecting the input signal

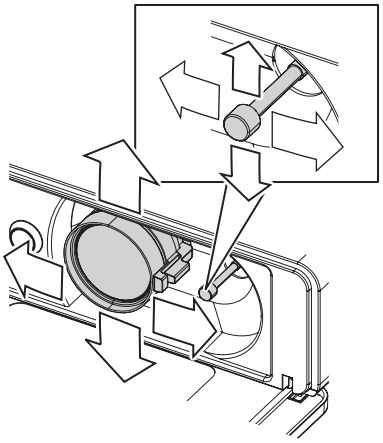
1. Switch on the connected devices.
   - Press the play button of the required device.
2. Press the **INPUT SELECT** buttons to select the required input method if needed. See “Switching the input signal” on page 24.
   - The image will be projected on the screen.

NOTE:

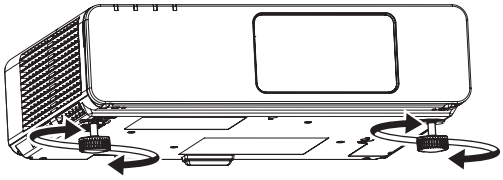
- **SIGNAL SEARCH** is **ON** as default and the signal from the connected devices is detected automatically. See “SIGNAL SEARCH” on page 35.

Positioning the image

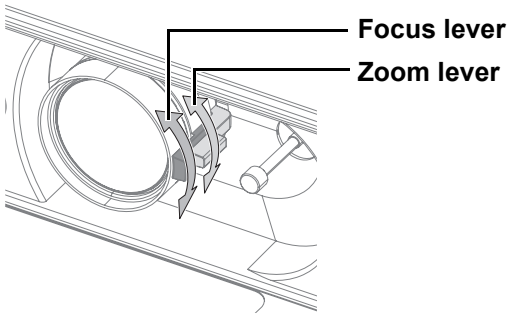
1. Open the **Front panel cover**.
2. Adjust the projected image with the **Lens shift lever**. See “Lens shift and positioning” on page 16.



3. Adjust the angle of the projector.
   - Screw down the **Front leg adjusters** and adjust the angle vertically.
   - See “Front leg adjusters and throwing angle” on page 15.



4. Adjust the focus and the projected image size.
   - Turn the **Focus lever** and **Zoom lever** to adjust the image.
   - You can confirm the adjusted effect with the **TEST PATTERN** in **OPTION** menu. See “TEST PATTERN” on page 36.

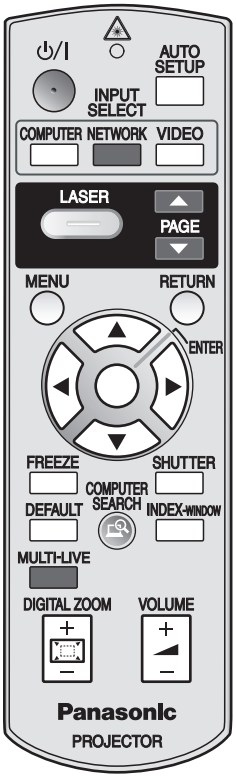


NOTE:

- Do not touch the **Air Exhaust port** as this may cause burns or injury.
- If keystone distortion occurs, see “KEYSTONE” on page 32.
- If you adjust the focus, you may need to adjust the size of the image by moving the **Zoom lever** again.

Remote control operation

Operating range



You can operate the projector with the **Remote control** within the remote range 15 m (49'2"), approximately ± 30° vertically and horizontally.

Facing to the projector

Ensure the **Remote control emitter** is facing to the **Remote control signal receptor** on front/back of the projector and press the required buttons to operate.

Facing to the screen

Ensure the **Remote control emitter** is facing to the screen and press the required buttons to operate the projector. The signal will be reflected off the screen. The operating range may differ due to the screen material. This function may not be effective with a translucent screen.

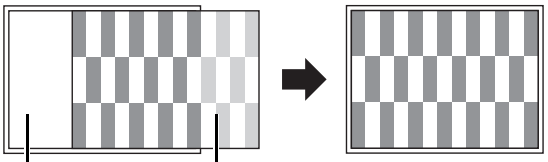
NOTE:

- Do not let strong light shine onto the signal receptor. The **Remote control** may malfunction under strong light such as fluorescent.
- If there are any obstacles between the **Remote control** and the **Remote control signal receptor**, the **Remote control** may not operate correctly.

Setting up the image position automatically

AUTO SETUP

You can adjust the setting of **POSITION**, **DOT CLOCK** and **CLOCK PHASE** in **POSITION** menu automatically for the projected **COMPUTER** signal image.



NOTE:

- If the dot clock frequency is 108 MHz or higher, **AUTO SETUP** is not effective.
- If the projected image is dark or blurred around the edge, **AUTO SETUP** may stop the processing before complete. Project a much clearer or lighter image and press the **AUTO SETUP** button again.

Switching the input signal

You can switch the input method manually by pressing the **COMPUTER**, **NETWORK** (PT-F200NTU only) and **VIDEO** buttons. Press the required button several times or ◄ ► to cycle through the input methods as follows. The actual projected image will be changed in a while.

- The graphical guidance will be displayed on the upper right of the projected image and you can confirm the selected input method which is highlighted in yellow. See "INPUT GUIDE" on page 34.

Pressing the COMPUTER button

COMPUTER1 ⇔ COMPUTER2

NOTE:
- Only when the **COMPUTER2 SELECT** is set to **INPUT**, you can switch between **COMPUTER1** and **COMPUTER2**.

Pressing the NETWORK button

- The **NETWORK** button is only for PT-F200NTU.
- See **CD-ROM** contents for more detailed information.

Pressing the VIDEO button

VIDEO ⇔ S-VIDEO

VIDEO ⇕ COMPONENT

S-VIDEO ⇕ COMPONENT

Pressing the INPUT SELECT button on the projector

COMPUTER1 → COMPUTER2 → S-VIDEO → VIDEO → COMPONENT → NETWORK → COMPUTER1

- **NETWORK** is only for PT-F200NTU.

NOTE:
- If you select an unplugged input method, the guidance will blink on and off several times.
- See "List of compatible signals" on page 44.
- See "Connections" on page 18.

Using the laser pointer

You can highlight items on the screen with the red laser pointer while projecting the image in presentations or visual demonstrations as an eye-catching pointing device.
Hold down the **LASER** button to goes on the laser pointer and release to goes off.

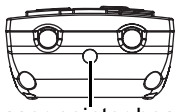
NOTE:
- The laser pointer should never be projected directly into the eyes of a person or animal.
- Do not aim the laser at reflective surfaces.
- Do not allow children to use laser pointer.
- Never look directly into the laser beam.
- The laser pointer is not effective with translucent screens.
- Please read the cautions on the **Remote control**.
- This is a Class 2 laser product.

Deactivating the LASER button

You can deactivate the **LASER** button for an accidental operation.

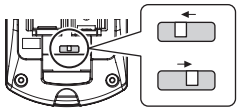
1. Open the battery compartment cover of the **Remote control**.
2. Slide the switch tab.
3. Close the battery compartment cover of the **Remote control**.
   - See "Battery compartment" on page 11.

- Top view

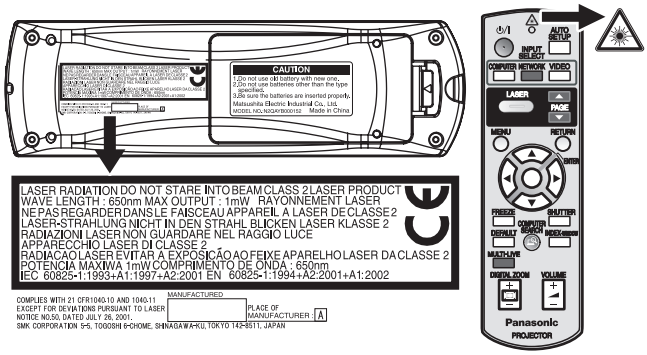


Laser pointer beam emitter

- Deactivating switch



- Cautions


CAUTION
LASER RADIATION DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT
WAVE LENGTH : 650nm MAX OUTPUT : 1mW RAYONNEMENT LASER
NE PAS REGARDER DANS LE FAISCEAU APPAREIL A LASER DE CLASSE 2
LASER-STRAHLUNG NICHT IN DEN STRAHL BLICKEN LASER KLASSE 2
RADIAZIONI LASER NON GUARDARE NEL RAGGIO LUCE
APPARECCHIO LASER DI CLASSE 2
RADIACAO LASER EVITAR A EXPOSIÇÃO AO FEIXE APARELHO LASER DA CLASSE 2
POTENCIA MAXIMA 1mW COMPRIMENTO DE ONDA : 650nm
IEC 60825-1:1993+A1:1997+A2:2001 EN 60825-1:1994+A2:2001+A1:2002
COMPLIES WITH 21 CFR1040.10 AND 1040.11 EXCEPT FOR DEVIATIONS PURSUANT TO LASER NOTICE NO.50, DATED JULY 26, 2001.
MANUFACTURED
PLACE OF MANUFACTURER: A
Panasonic
PROJECTOR

CAUTION: Use of controls of adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Capturing an image

FREEZE

When projecting an image, press **FREEZE** to capture the projected image and display it on the screen as a still picture. While the image is frozen, the sound will be stopped.

Press the **FREEZE** button to return to the projection.

NOTE:
- Not available with **NETWORK** signals.

Stopping the projection temporary

SHUTTER

You can turn off the lamp and stop the projection temporary for electrical power save.

Press the **SHUTTER** button to return to the projection.

Resetting to the factory default settings

DEFAULT

You can reset most of the customized settings to the factory defaults by pressing the **DEFAULT** button of the **Remote control**. Display the required sub menu or the menu items and press the **DEFAULT** button again.

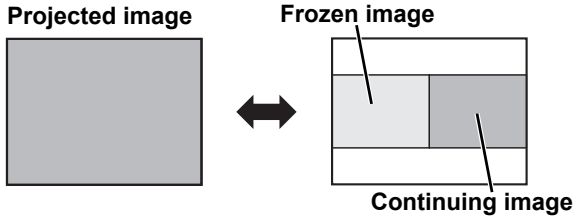
● See “Main menu and Sub-menu” on page 28.

NOTE:
- Some menu items are not available to reset by pressing the **DEFAULT** button. Adjust each menu items manually.
- To reset all the settings to the factory defaults, see “INITIALIZE ALL” on page 36.

Projecting an image in INDEX-WINDOW mode

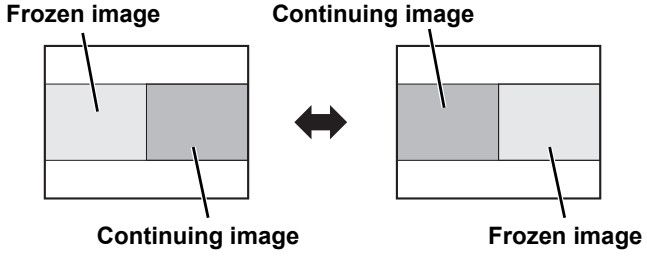
INDEX-WINDOW

You can project an image in split 2 windows as an **INDEX-WINDOW**, one is frozen, stored in memory and displayed on the screen’s left side, while the display of subsequent images continues on the right.
To escape from the **INDEX-WINDOW**, press the **MENU** or **RETURN** button.



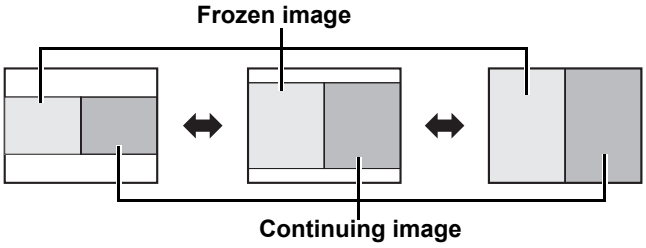
● Switching the position

In default, the frozen image is displayed on the left and the subsequent image is displayed on the right. Press ◄ ► to switch the position.



● Changing the image size

Press ▲ ▼ to capture a new image and change the size in 3ways.



NOTE:
- If you change the window size, the aspect ratio of the image is changed and becomes vertically elongated.

● Capturing a new image

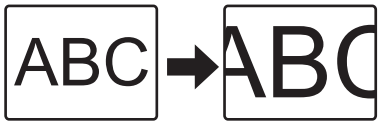
While in **INDEX-WINDOW** mode, press **ENTER** to capture a new image and the frozen image window will be updated in a while.

Enlarging the centered area

You can enlarge the projected image down to a centered area for emphasizing within the range of 1x to 2x.

● Enlarging the image

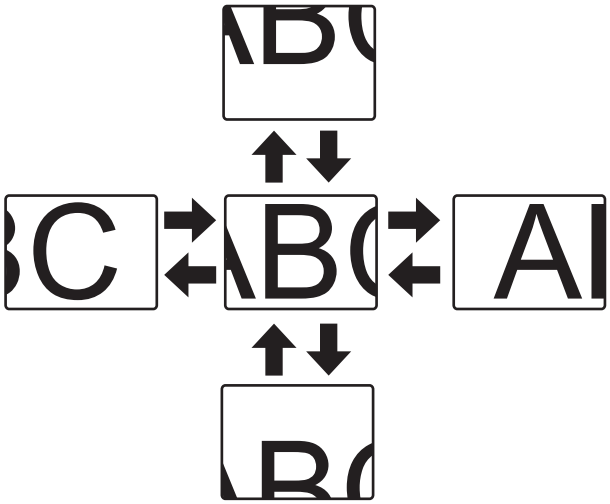
1. Press **DIGITAL ZOOM +/-** once.
   - The centered area of the image will then be enlarged to 1.5x.



2. Adjust the image size by pressing **DIGITAL ZOOM +/-**.
   - The image size will be changed in steps of 0.1.

● Shifting the center point

Press ▲ ▼ ◄ ► to shift the center point.



NOTE:

- When the **COMPUTER** signal is projected, the enlargement range will be changed to 1x to 3x. When the **FRAME LOCK** in **POSITION** menu is set to **ON**, the enlargement range is 1x to 2x. See “FRAME LOCK” on page 33.
- When the input signal is changed while the **DIGITAL ZOOM** is activated, the **DIGITAL ZOOM** will be cancelled.
- While the **DIGITAL ZOOM** is activated, **FREEZE** is not available.

Controlling the volume of the speaker

You can control the volume of the built-in speakers and output sound. Press +/- to control the volume.

NOTE:

- Power consumption can be reduced if the volume level is lowered.

Menu Navigation

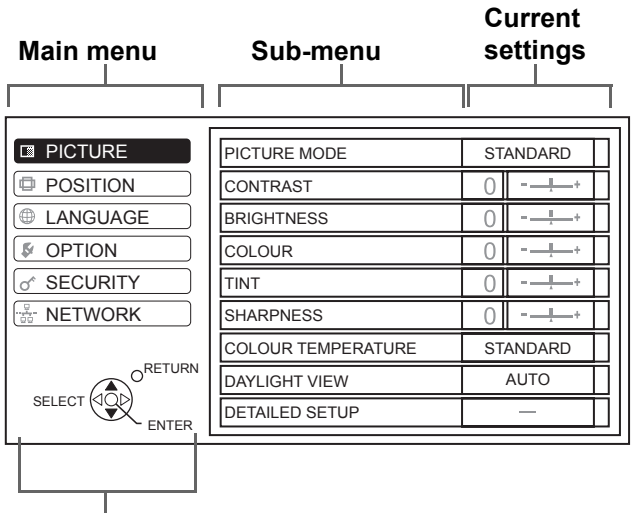
The menu system allows you to access functions which do not have their own dedicated buttons on the **Remote control**. The menu options are structured and categorized. You can navigate through the menu with ▲ ▼ ► ◄ buttons.

Navigating through the MENU

Displaying the Main menu

MENU

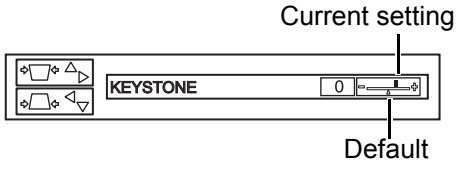
Press the **MENU** button to display the **Main menu** and the operating guidance.



Operating guidance
Contains the required buttons to adjust the settings.

Adjusting with the bar scale items

The triangle mark under the bar indicates factory default setting and the square indicates the current setting.



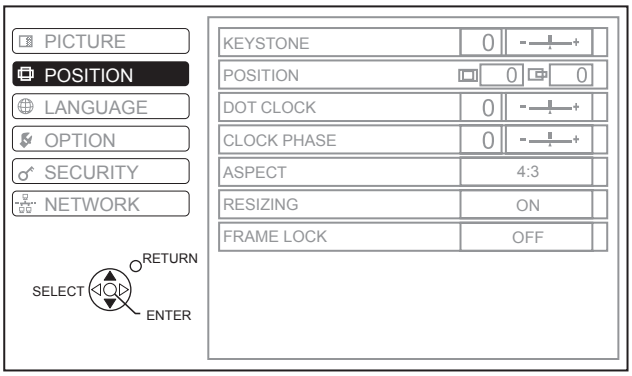
Returning to the previous menu

RETURN

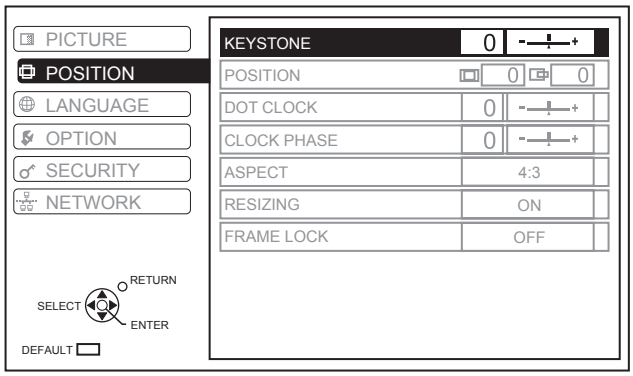
Press the **MENU** or **RETURN** button to return to the previous menu. Press repeatedly to escape from the menu mode and return to the projection.

Operating procedure

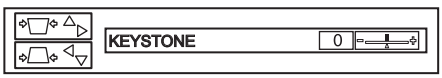
1. Press ▲ ▼ to scroll to the required **Main menu** item and press **ENTER** to select.
   - The selected item is highlighted in orange and the **Sub-menu** is displayed on the right.
   - See “Main menu and Sub-menu” on page 28.



2. Press ▲ ▼ to scroll to the required **Sub-menu** item and press ◄ ► or **ENTER** to adjust.
   - The selected item is called up and the other menu items disappear from the screen. Called up item will be disappear after 5 seconds and return to the menu mode.
   - If there is a lower level, the next level will be displayed.



3. Press ◄ ► to adjust or set the selected item.
   - For items using a bar scale, the current settings are displayed on the left of the bar scale.
   - You can cycle through the options of an item by pressing ◄ ►.



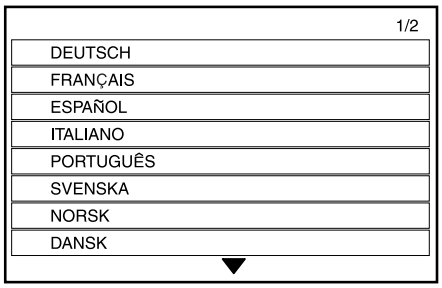
4. Press **MENU** or **RETURN** to return to the previous menu.

NOTE:
- See “Resetting to the factory default settings” on page 25 to reset each menu items.
- See “INITIALIZE ALL” on page 36 to reset all the settings.

Main menu and Sub-menu

The **Main menu** has 6 options. Select the required menu item and press **ENTER** to display the **Sub-menu**.

NOTE:
- Some default settings vary by the selected input signal.
- **Sub-menu** items vary according to the selected input signal.
- Some settings are adjustable without any signals.

Main menu	Sub-menu	Options (underlined is default setting)		Page
PICTURE	**PICTURE MODE**	**NATURAL** **STANDARD**	**DYNAMIC**[*1] **BLACKBOARD**	page 30
	CONTRAST	• Default: 0		page 30
	BRIGHTNESS	• Default: 0		page 30
	COLOR[*2]	• Default: 0		page 30
	TINT[*2]	• Default: 0		page 30
	SHARPNESS	• Default: 0		page 30
	COLOR TEMPERATURE	**LOW** **HIGH**	**STANDARD**	page 30
	DAYLIGHT VIEW	**AUTO** **OFF**	**ON**	page 30
	DETAILED SETUP[*2]	**WHITE BALANCE**[*2] • Default: 0	**WHITE BALANCE RED** **WHITE BALANCE GREEN** **WHITE BALANCE BLUE**	page 31
		TV-SYSTEM (S-VIDEO/VIDEO signals only)	**AUTO** **NTSC** **NTSC 4.43** **PAL** **PAL-M** **PAL-N** **SECAM**
		STILL MODE (S-VIDEO/VIDEO)	**OFF** **ON**
		NOISE REDUCTION (S-VIDEO/VIDEO)	**OFF** **ON**
POSITION	**KEYSTONE**	• Default: 0		page 32
	POSITION[*2]	**H**	• Default: 0	page 32
		V	• Default: 0	
	DOT CLOCK[*2]	• Default: 0		page 32
	CLOCK PHASE[*2]	• Default: 0		page 32
	ASPECT[*2]	**4:3** **S4:3**	**16:9**	page 32
	RESIZING[*2]	**OFF**	**ON**	page 33
	FRAME LOCK[*2]	**OFF**	**ON**	page 33
LANGUAGE				

*1. Default setting for **COMPUTER**/**NETWORK** signals

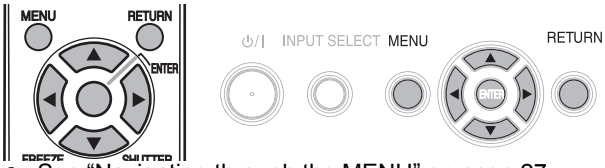
*2. **Sub-menu** items vary according to the selected input signal.

Main menu	Sub-menu	Options (underlined is default setting)			Page
OPTION	**INPUT GUIDE**	**DETAILED**	**SIMPLE**		page 34
		OFF			
	STARTUP LOGO	**ON**	**OFF**		page 34
		USER			
	COMPUTER2 SELECT	**INPUT**	**OUTPUT**		page 34
	FILTER REMAINING				page 34
	LAMP RUNTIME				page 34
	POWER OFF TIMER	**OFF**			page 35
		15 MIN.	**20 MIN.**		
		25 MIN.	**30 MIN.**		
		35 MIN.	**40 MIN.**		
		45 MIN.	**50 MIN.**		
		55 MIN.	**60 MIN.**		
	DIRECT POWER ON	**OFF**	**ON**		page 35
	CONTROL PANEL	**VALID**	**INVALID**		page 35
	AUTO SETUP	**AUTO**	**BUTTON**		page 35
	SIGNAL SEARCH	**ON**	**OFF**		page 35
	INSTALLATION	**FRONT/DESK**	**FRONT/CEILING**		page 35
		REAR/DESK	**REAR/CEILING**		
	ALTITUDE	**LOW**	**HIGH**		page 35
	CLOSED CAPTION SETTING	**CLOSED CAPTION**	**OFF**	**ON**	page 36
		MODE	**CC1**	**CC2**	
			CC3	**CC4**	
	TEST PATTERN				page 36
	DETAILED SETUP	**OSD DESIGN**	**TYPE1**	**TYPE2**	page 36
			TYPE3		
		SXGA MODE	**SXGA**	**SXGA+**	
		WIDE MODE	**OFF**	**ON**	
		BLACKBOARD	**ON**	**OFF**	
		BACK COLOR	**BLUE**	**BLACK**	
		VOLUME	• Default: 0		
		AUDIO BALANCE	• Default: 0		
		INITIALIZE ALL			
SECURITY	**INPUT PASSWORD**	**OFF**	**ON**		page 37
	PASSWORD CHANGE				page 37
	TEXT DISPLAY	**OFF**	**ON**		page 37
	TEXT CHANGE				page 37
NETWORK (PT-F200NTU only. See **CD-ROM** contents)	**WIRED LAN** **WIRELESS LAN** **NAME CHANGE** **INPUT PASSWORD** **NETWORK STANDBY** **WEB CONTROL** **LIVE MODE CUT IN** **STATUS** **INITIALIZE**				page 38

Settings

PICTURE menu

Remote control **Control panel**



- See “Navigating through the MENU” on page 27.
- See “Main menu and Sub-menu” on page 28.

PICTURE MODE

Depending on the projection environment, you can use these preset parameter settings to optimize image projection. Press ◄ ► to cycle through the options.

NATURAL	Reproduces the original color of the image
STANDARD	Setting for a general image
DYNAMIC	Bright and sharp setting
BLACKBOARD	Setting for when projecting on a blackboard See “BLACKBOARD” on page 36.

NOTE:
- It may take for a while until the selected mode is stabilized.

CONTRAST

You can adjust the contrast of the projected image. Adjust the **BRIGHTNESS** in advance if necessary.

Lower **Higher**

BRIGHTNESS

You can adjust the brightness of the projected image.

Darker **Brighter**

COLOR

You can adjust the color saturation of the projected image. (Available with signals from **VIDEO**/**S-VIDEO**/**COMPONENT** only)

Lighter **Darker**

TINT

You can adjust the skin tone in the projected image. (Available with signals from **VIDEO**/**S-VIDEO**/**COMPONENT** only)

More reddish **More greenish**

SHARPNESS

You can adjust the sharpness of the projected image.

Less sharp **More sharp**

COLOR TEMPERATURE

You can adjust the white balance of the projected image.
- **LOW** More bluish
- **STANDARD** Balanced white
- **HIGH** More reddish

DAYLIGHT VIEW

You can keep the projected image bright and vivid even in well-lit rooms where the ambient light sources cannot be controlled, such as when a door opens or when window coverings fail to block out sunlight.
- **AUTO**: Automatic adjustment
- **ON**: Active
- **OFF**: Deactive

NOTE:
- Do not cover the **ALS** (Ambient Luminance Sensor) of the projector. See “ALS (Ambient Luminance Sensor)” on page 12.
- **AUTO** is not available when **INSTALLATION** setting in **OPTION** menu is set to **REAR/DESK** or **REAR/CEILING**.

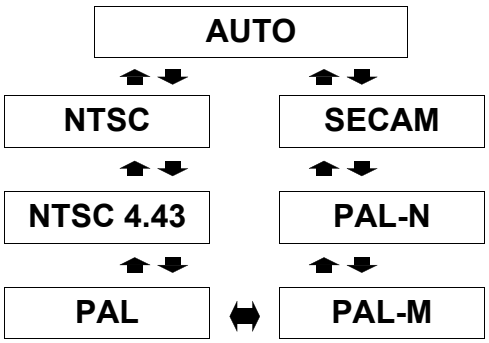
DETAILED SETUP

You can perform more detailed image adjustment manually.

For S-VIDEO/VIDEO signals

TV-SYSTEM

When the video signal is changed, the setting switches automatically. You can switch the setting manually to match the video data. Press ◄ ► to cycle through the options.



NOTE:

- **AUTO** setting will select from **NTSC**/**NTSC 4.43**/**PAL**/**PAL60**/**PAL-M**/**PAL-N**/**SECAM**.

STILL MODE

You can reduce the vertical flicker when projecting a still image.

- **OFF**: Deactive
- **ON**: Active

NOTE:

- Set to **OFF** when projecting a moving image.

NOISE REDUCTION

You can switch the automatic noise reduction system on/off. Press ◄ ► to select the required setting.

- **OFF**: No noise reduction
- **ON**: Automatic noise reduction

NOTE:

- Applying noise reduction may affect image quality.

For RGB signals

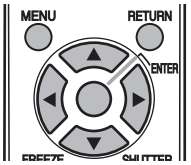
WHITE BALANCE

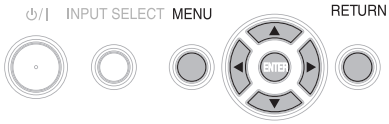
You can adjust the white balance more properly in 3 colors temperature by pressing ◄ ►.

- **WHITE BALANCE RED**
- **WHITE BALANCE GREEN**
- **WHITE BALANCE BLUE**

POSITION menu

Remote control **Control panel**

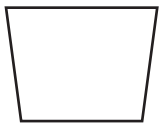
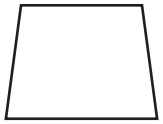
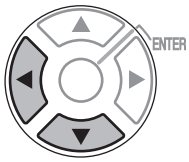




- See “Navigating through the MENU” on page 27.
- See “Main menu and Sub-menu” on page 28.

KEYSTONE

If the projector is aligned non-perpendicularly to the screen, or if the projection screen has an angled surface, you can correct keystone.

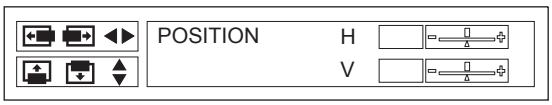
Image	Operation
	
	

NOTE:

- You can correct the distortion ± 30 degrees from the plane. For a better quality image, installing the projector with a minimum of distortion is recommended.
- Some distortion may be retained for lens shift adjustment.
- The distortion of the **Main menu** screen is not correctable.
- The result of the keystone correction will affect the aspect ratio and the size of the image.

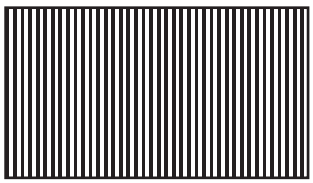
POSITION

You can move the projected image for fine adjustment. Press ◄ ► to move horizontally and ▲ ▼ vertically. (Available with signals from **VIDEO**/**S-VIDEO**/ **COMPUTER**/**COMPONENT** only)



DOT CLOCK

If you have interference patterns of the projected image, which is sometimes referred to as moire or noise, you can minimize it by pressing ◄ ► to adjust the clock frequency. (Available with signals from **COMPUTER** only)



NOTE:

- If the projecting signal’s dot clock frequency is higher than 108 MHz, the adjustment may not make a difference.
- **DOT CLOCK** needs to be adjusted before adjusting the **CLOCK PHASE**.

CLOCK PHASE

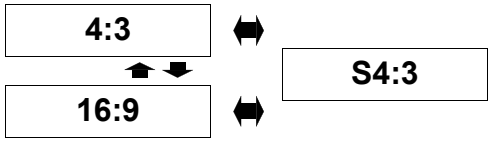
If you require further adjustment for the same reason as the **DOT CLOCK** adjustment, you can fine adjust the timing of the clock. Press ◄ ► to adjust. (Available with signals from **COMPUTER**/**COMPONENT** only)

NOTE:

- If the projecting signal’s dot clock frequency is higher than 108 MHz, the adjustment may not make a difference.

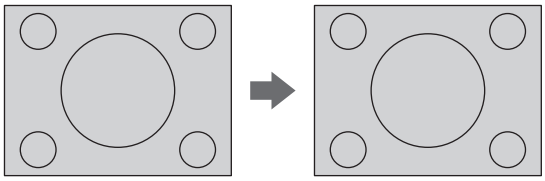
ASPECT

You can switch the aspect ratio manually when needed. Press ◄ ► to cycle through the options.



● **4:3**

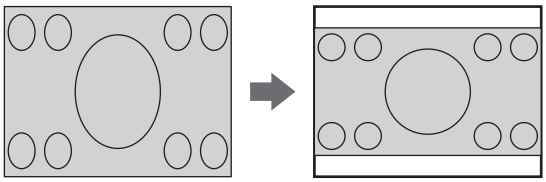
The input signal will be projected without any change.



Settings

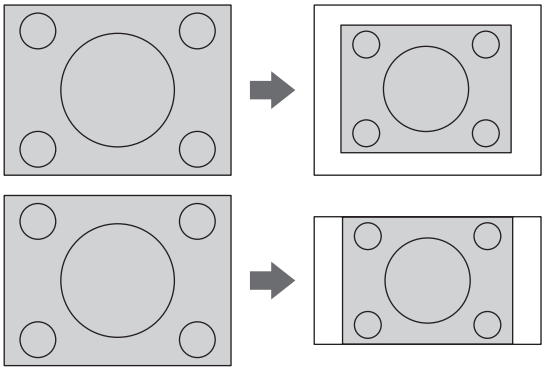
● **16:9**

The squeezed signal will be projected in 16:9 ratio.



● **S4:3**

The input signal will be sized down 75 % and projected. **S4:3** mode is effective when projecting 4:3 image on to a 16:9 screen.



● **AUTO**

The S1 signal which contains an identifying signal will be detected and automatically project the image in proper ratio. (Available with **S-VIDEO** signals only)

NOTE:

- If you project an image with an unmatched aspect ratio, the image may distort or some portions may be cropped. Select an aspect ratio which preserves the intention of the image creator.
- The order of **ASPECT** types is defined not only by the input method but also by the input signals. See “List of compatible signals” on page 44.
- If you project a copyrighted image enlarged or distorted by using **ASPECT** function in commercial use in a public place, such as a restaurant or hotel, you might infringe on the copyright of the creator which is protected by copyright law.

RESIZING

When the input signal resolution is lower than the projector resolution, it will be projected at the projector resolution. You can deactivate the **RESIZING** and project the lower resolution input signal at its original resolution. Press ◄ ► to select the required setting.

- **ON** Active
- **OFF** Deactive

NOTE:

- Usually the recommended setting is **ON**.
- When the **RESIZING** is set to **ON**, the lower resolution input signal may be projected in less quality.

When the RESIZING is set to OFF;

- The size of the image will be projected smaller and you may need to adjust **ZOOM** and **FOCUS**, or the projector position backwards and forwards.
- **DIGITAL ZOOM**, **KEYSTONE** and **INDEX-WINDOW** are not available.

FRAME LOCK

If the projected image is degraded, you can activate **FRAME LOCK** for synchronization. Press ◄ ► to select the required option.

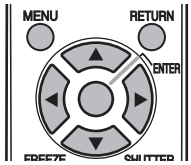
- **OFF** Deactive
- **ON** Active

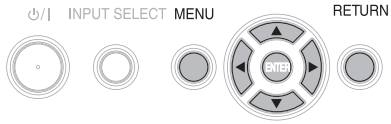
NOTE:

- This function is available with some of the **COMPUTER** signals only.

OPTION menu

Remote control **Control panel**





- See “Navigating through the MENU” on page 27.
- See “Main menu and Sub-menu” on page 28.

INPUT GUIDE

When you change the input method, the guidance appears in the upper right corner of the screen. The following display methods are available. Press ◄ ► to cycle through the options.

Options	Function
OFF	Turn off the guidance.
SIMPLE	Display the input method by text. The **INPUT GUIDE** will go out after 5 seconds without any operation.
DETAILED	Display the input method by graphic. The **INPUT GUIDE** will go out after 10 seconds without any operation. If you select any **COMPUTER** terminal which has no signal, the computer connection guidance will be displayed. See “Computer connection guidance” on page 46.

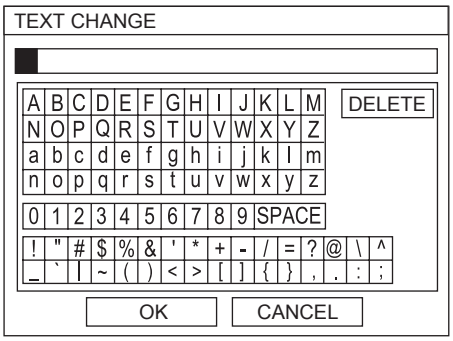
STARTUP LOGO

You can switch the logo on/off that is displayed when starting up the projector. Press ◄ ► to select the required option. **STARTUP LOGO** will be displayed for 30 seconds.

- **ON** Active
- **OFF** Deactive
- **USER** Display the original text

Editing the original text

If you select **USER**, you can display the 2 lines of original text up to 40 characters in 1 line instead of the logo.



1. Select **USER** and press **ENTER**.
2. Select the required line to enter or edit the original text, and press **ENTER**.
3. Use ▲ ▼ ◄ ► to specify the location of the required character and press **ENTER**.
   - The selected character will be displayed in the box.
   - Select **DELETE** to delete the last entered character and press **ENTER**.
4. Repeat the step 3 until you finish the text to display in a line.
5. Select **OK** and press **ENTER** to set the entered text in a box.
   - Press ▼ and edit the **TEXT2** if you need to, and repeat the step 3 - 5.

COMPUTER2 SELECT

You can switch the function of the **COMPUTER2 IN/ 1 OUT** terminal.

- **INPUT** **COMPUTER2 IN**
- **OUTPUT** **COMPUTER1 OUT**

FILTER REMAINING

You can check the remaining amount of the **ARF** (Auto Rolling Filter). The color of the bar scale is indicating the condition of the **ARF**.

- Yellow The filter remaining amount is getting low.
- Red No more remaining.

NOTE:

- See “Replacing the ARF (Auto Rolling Filter)” on page 40.
- After you replace the **ARF**, **FILTER REMAINING** should be reset to “0” by pressing the **ENTER** button for 3 seconds.

LAMP RUNTIME

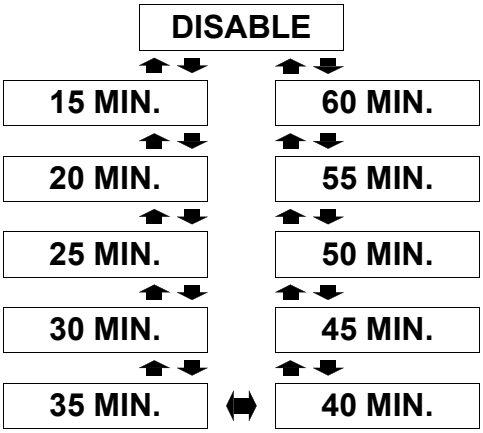
You can check how long the lamp has been used.

NOTE:

- **LAMP RUNTIME** is a relevant matter for lamp replacement timing. See “Replacing the Lamp unit” on page 41.
- When the lamp unit is replaced with the new one (ET-LAF100), the setting will be reset to “0”.

POWER OFF TIMER

You can set the off timer to switch off the **POWER** of the projector after a certain period of time automatically when no signal is detected. Press ◄ ► to select the required period from 15 to 60 minutes at intervals of 5 minutes.



DIRECT POWER ON

You can switch the projector start up status for when the **Mains lead** is connected while the **MAIN POWER** is on, or for when the **MAIN POWER** is switched on while the **Mains lead** is connected. Press ◄ ► to select the required option.

- **OFF** The projector will start from the standby mode or the projecting mode.
- **ON** The projector will start from the projecting mode.

NOTE:
- When the projector is started from the projecting mode, pressing the **POWER** button procedure is skippable.

CONTROL PANEL

You can turn off the function of the control panel buttons on the projector body. Press ◄ ► to select the required option.

- **INVALID** Invalidate the control panel buttons Confirmation screen will be displayed.
- **VALID** Validate the control panel buttons

AUTO SETUP

You can turn off the **AUTO SETUP** function for when the **COMPUTER** signal is detected.

- **AUTO** When the projector detect a **COMPUTER** signal, adjust the projected image position automatically for **SIGNAL SEARCH**, **DOT CLOCK** and **CLOCK PHASE**.
- **BUTTON** Only when the **AUTO SETUP** button is pressed, the projected image position will be adjusted for **DOT CLOCK** and **CLOCK PHASE**. See “Remote control” on page 11.

NOTE:
- Usually the recommended setting is **AUTO**.

SIGNAL SEARCH

You can turn off the auto signal detecting system.

- **ON** Detect the input signal from the terminals and project the image.
- **OFF** Deactive

NOTE:
- **SIGNAL SEARCH** is not available when any input signal is projecting.
- Usually the recommended setting is **ON**.

INSTALLATION

When installing the projector, select the projection method according to the projector position. Press ◄ ► to cycle through the options. See “Projection method” on page 15.

FRONT/DESK	Setting on a desk/floor and projecting from front
FRONT/CEILING	Mounting in the ceiling and projecting from front
REAR/DESK	Setting on a desk/floor and projecting from rear
REAR/CEILING	Mounting in the ceiling and projecting from rear

ALTITUDE

If you use the projector at high elevation, the **ALTITUDE** setting need to be **HIGH** to set the fan speed high. Press ◄ ► to select the required option.

- **LOW** The fan speed is low.
- **HIGH** The fan speed is high.

NOTE:
- At 1 400 - 2 700 m (4 593 - 8 858 ft) sea level, the setting must be **HIGH**.
- The loudness of fan noise depends on the **ALTITUDE** setting.

CLOSED CAPTION SETTING

If the input signal contains closed captions, you can turn on the feature and switch the channels.

- **OFF** Deactive
- **ON** Active
- **CC1** - **4** Change the channels from **MODE**

NOTE:
- VCR with TBC (Time Base Corrector) function is recommended for video cassette tapes.

TEST PATTERN

You can use the 7 different test patterns to adjust the focus of the image. See “Lens shift and positioning” on page 16.

1. Press **ENTER** to display the test pattern 1.
2. Press ◄ ► to select the required test pattern.
3. Press **MENU** or **RETURN** to return to the previous menu, oar press repeatedly to escape the menu mode.

DETAILED SETUP

You can perform more detailed setting in various items.

OSD DESIGN

You can change the background color of the menu. Press ◄ ► to select the required option.

TYPE1	Semi transparent black
TYPE2	Solid blue
TYPE3	Semi transparent dark blue

SXGA MODE

You can switch the setting between **SXGA** and the larger setting, **SXGA+**. Press ◄ ► to select the required option.

WIDE MODE

You can turn **ON**/**OFF** the **WIDE MODE** setting.

- **ON** For WIDE signals
- **OFF** For other type of signals

BLACKBOARD

You can exclude the **BLACKBOARD** in menu items of **PICTURE MODE** in **PICTURE** menu. Press ◄ ► to select the required option.

- **ON** Include the **BLACKBOARD** in menu items.
- **OFF** Exclude the **BLACKBOARD** in menu items.

BACK COLOR

You can choose a **BLUE** or **BLACK** screen for when the projector is idle. Press ◄ ► to select the required option.

VOLUME

You can adjust the volume of the built-in monaural speaker and **VARIABLE AUDIO OUT** terminal.

- ◄ Decrease
- ► Increase

AUDIO BALANCE

You can adjust to hear the sound played equally through both right and left external stereo speakers, or shift the balance so more sound plays through the left or right side.

- ◄ More sound plays through the left side
- ► More sound plays through the right side

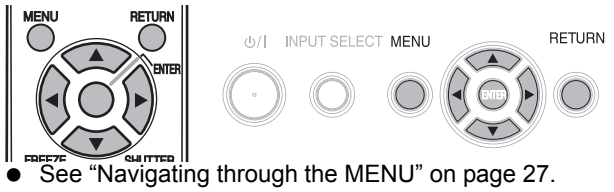
INITIALIZE ALL

You can reset all of the customized settings to the factory defaults except **NETWORK**, **LAMP RUNTIME** and **FILTER REMAINING** menu settings.

1. Press the **ENTER** button
2. Turn off the projector by pressing the **POWER** button.
3. Switch off the **MAIN POWER** button to reset the projector.
4. The minimum required setting screen will be displayed.
   - See “Minimum required setting screen” on page 10.

SECURITY menu

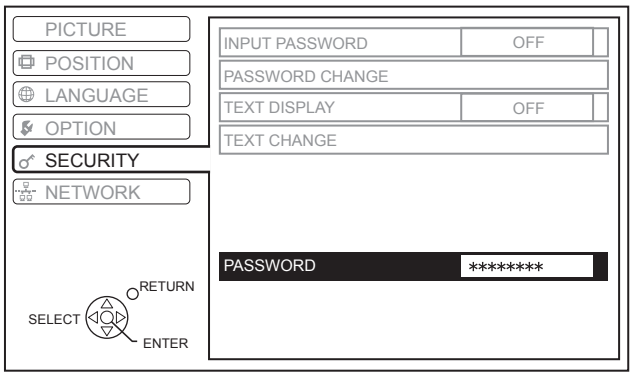
Remote control **Control panel**



- See “Navigating through the MENU” on page 27.
- See “Main menu and Sub-menu” on page 28.

Entering the SECURITY menu

Every time when you apply to the **SECURITY** menu, you will be asked to perform the password operation.



When you apply to the **SECURITY** menu before you change the password to your original, perform to input the following factory default password operation.

- Press ▲ ► ▼ ◄ ▲ ► ▼ ◄ and **ENTER**.

After you change the password

When you apply to the **SECURITY** menu after you change the password to your original in the **PASSWORD CHANGE** menu, input the original password operation.

NOTE:

- The factory default password is valid until you change the password in **PASSWORD CHANGE** menu.
- The entered password operations will appear as asterisks in the box.

INPUT PASSWORD

You can activate the security system and the password operation will be asked to perform when the projecting mode started. Unless you perform the correct password operation, all of the button controls will be disabled except the **POWER** button.

- **OFF** Deactive
- **ON** Active

NOTE:

- When you activated the security system, make sure to change the password to your original for safety.
- The security system is **OFF** by default and when initialized.

PASSWORD CHANGE

You can change the password operation to your original.

1. Press a series of button operation up to 8 as a password by using ▲ ▼ ◄ and ► buttons.
2. Press **ENTER**.
3. Press the exact same series of button operation you entered in the **NEW** password box for confirmation.
   - If a series of button operation is incorrect, you will be asked to perform again.
4. Press **ENTER**.

NOTE:

- The entered password operations will appear as asterisks in the box.
- Change your password regularly.
- Do not use too simple password to guess.

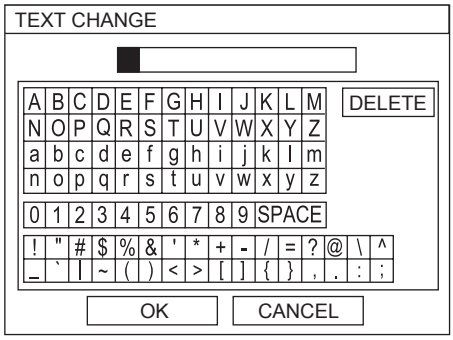
TEXT DISPLAY

You can set your original text, such as company name or URL information, to display regularly at the bottom of the projected image while projecting.

- **OFF** Deactive
- **ON** Active

TEXT CHANGE

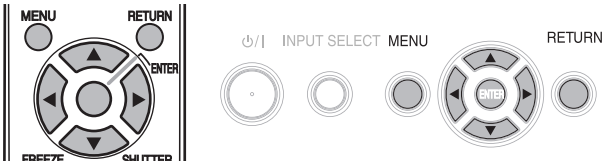
You can enter your original text up to 22 characters for **TEXT DISPLAY**.



1. Use ▲ ▼ ◄ ► to specify the location of the required character.
2. Press **ENTER**.
   - The selected character will be displayed in the **TEXT CHANGE** box.
3. Repeat until finish your original text.
   - Select **DELETE** to delete the last entered character and press **ENTER**.
4. Select **OK** and press **ENTER** to set the entered text.
   - Select **CANCEL** or press **MENU**/**RETURN** buttons to return to the previous menu.

NETWORK menu

Remote control **Control panel**



- See “Navigating through the MENU” on page 27.
- See “Main menu and Sub-menu” on page 28.

NOTE:

- The **NETWORK** menu is available only with PT-F200NTU.
- See the PJ Link or network information in the contents of the **CD-ROM** which is provided with the projector.

Items in NETWORK menu

In **NETWORK** menu, the following items are available.

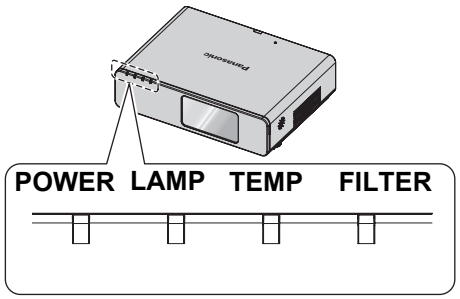
- **WIRED LAN**
- **WIRELESS LAN**
- **NAME CHANGE**
- **INPUT PASSWORD**
- **PASSWORD CHANGE**
- **NETWORK STANDBY**
- **WEB CONTROL**
- **LIVE MODE CUT IN**
- **STATUS**
- **INITIALIZE**

LAMP, TEMP and ARF Indicators

Managing the indicated problems

If a problem should occur with the projector, the **LAMP**, **TEMP** and/or **FILTER** indicators will inform you. Manage the indicated problems as follow.

1. Confirm the status of all indicators and projector, and switch off the projector in proper way.
2. Find out the cause of the problem by status of the **LAMP**, **TEMP** and/or **FILTER** indicators.
3. Follow the instruction for each indication below and solve the problem.
4. Turn on the projector in the correct way and confirm the indicator is not indicating a problem any longer.



NOTE:

- If no problem is found or the problem remains, do not turn on the projector. Instead contact an Authorized Service Center.

LAMP indicator

Indicator	● Illuminating **RED**	● Flashing **RED**		
Problem	**LAMP RUNTIME** has reached 4 800 hours.	**LAMP** circuit failure, abnormal function or **Lamp unit** is damaged.		
Cause	**Lamp unit** will run out soon and needs to be replaced.	The **MAIN POWER** is switched on again before the **Lamp unit** is cooled enough.	**LAMP** circuit failure, abnormal function.	**Lamp unit** is damaged.
Remedy	See “Replacing the Lamp unit” on page 41.	Let the **Lamp unit** cool down and turn on the **MAIN POWER** after 90 seconds.	Contact an Authorized Service Center.	See “Replacing the Lamp unit” on page 41.

TEMP indicator

Indicator	● Illuminating **RED** while projecting and the alert will be displayed. ● Flashing **RED** and **POWER** is turned off			
Problem	The temperature inside and/or outside the projector is abnormally high.			
Cause	The ventilation openings are covered.	The room temperature is too high.	The **ARF**is excessively dirty and the ventilation is poor.	The projector is located at high elevations 1 400 - 2 700 m (4 539 - 8 858 ft).
Remedy	Remove the object(s) from the ventilation openings or clear around the projector.	Reinstall the projector in temperature controlled place. See page 48.	Replace the **ARF** in the proper method. See page 40.	Turn on the projector*1 and set the **HIGHLAND** to **ON**. See page 35.

*1. The projector will perform only 2 minutes with **OFF** setting at high elevation.

FILTER indicator

When the **FILTER** indicator is flashing **GREEN**, the **ARF** is normally rolling up.

Indicator	● Illuminating **RED**	● Flashing **RED**	● Illuminating **ORANGE**	● Flashing **ORANGE**
Problem	**FILTER REMAINING** has turned red. See page 34.	The projector cannot detect the **ARF**.	The **ARF** cannot operate properly.	**FILTER REMAINING** has turned yellow. See page 34.
Cause	**ARF** has been run out.	**ARF** is not attached.	Foreign object is blocking the **ARF** operation.	**ARF** is running out and the remaining time is about 240 hours.
Remedy	See “Replacing the ARF (Auto Rolling Filter)” on page 40.	Attach the **ARF**.	Remove the foreign object or contact an Authorized Service Center.	Prepare the **ARF** for replacement.

Care and Replacement

Cleaning the projector

Before cleaning the projector

- Switch off the **MAIN POWER** and disconnect the power plug from the wall socket.
- Unplug all the cables from the projector.

Cleaning the outer surface of the projector

Wipe off dirt and dust gently with a soft cloth.

- If it is difficult to remove the dirt, soak a cloth with water, wring the cloth well and then wipe the projector. Dry off the projector with dry cloth.
- Do not use petroleum benzine, thinner, any alcoholic solvent, kitchen detergents or chemical clothes. Failure to observe these may result in altered or damaged surface of the projector.
- If you use a chemical treated wipe, follow the instructions supplied with it.

Cleaning the lens and front glass surface

Wipe off dirt and dust gently with a lint-free cloth.

- Make sure no dirt or dust remains on the surface of the lens. It will be enlarged and projected onto a screen.

Replacing the ARF (Auto Rolling Filter)

Before replacing the ARF

- Press the **POWER** button for at least 0.5 seconds or press twice to turn off the projector.
- Wait until the cooling fan stops and the **POWER** indicator turn to **RED**.
- Disconnect the **Mains lead** from the main socket.
- Prepare a Phillips-head screw driver.
- Contact an Authorized Service Centre to purchase a replacement **ARF** (ET-RFF100).

When to replace the ARF

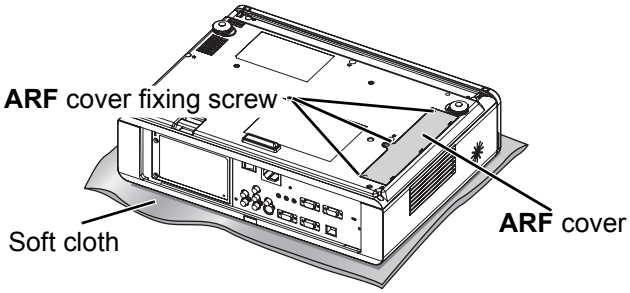
ARF is consumable product and effects on ventilation. **FILTER** indicator will inform you of the replacement timing. You can check the remaining amount of the **ARF** in **FILTER REMAINING** menu.

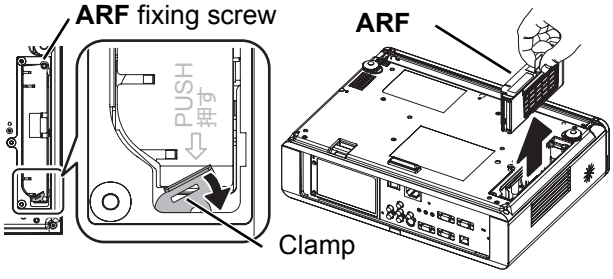
NOTE:

- See “FILTER REMAINING” on page 34 and “FILTER indicator” on page 39.
- The approximate maximum replacement timing is 6 000 hours and minimum is 500 hours, and it depends on the use environment.

Replacement procedure

1. Turn the projector upside down and place it gently on a soft cloth.
2. Use a Phillips-head screwdriver to loosen 3 **ARF cover** fixing screws until the screws turn freely and remove the **ARF cover**.
3. Use a Phillips-head screwdriver to loosen an **ARF** fixing screws and release the clamp, then slightly slide up the used **ARF** to remove.
4. Insert the new **ARF** into the compartment in correct direction and slightly push down until it clicks. Tighten the **ARF** fixing screws securely.
5. Attach the **ARF cover** and tighten the **ARF cover** fixing screws securely.



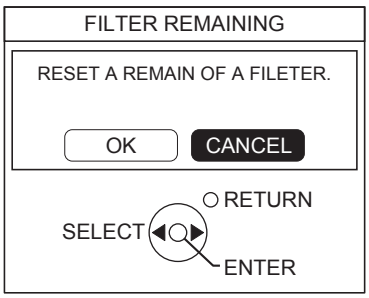


NOTE:

- If the **ARF** and/or **ARF cover** are attached incorrectly, the projector may not be turned on.
- Do not switch the power on while the **ARF cover** removed.
- When you replace the **ARF** unit, clean the compartment and/or the **Air Exhaust port** if you need to.

Resetting the FILTER REMAINING

1. Turn on the projector and display the **FILTER REMAINING** in **OPTION** menu. Press the **ENTER** button for 3 seconds and the confirmation screen will be displayed.
2. Press ◄ to select **OK** and press the **ENTER** button to reset **FILTER REMAINING** to "0". See "FILTER REMAINING" on page 34.



Replacing the Lamp unit

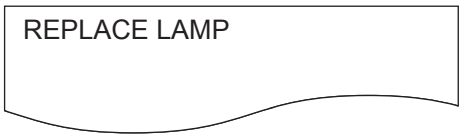
Before replacing the Lamp unit

- Switch off the **MAIN POWER** and disconnect the power plug from the wall socket.
- Wait for more than 1 hour and make sure the **Lamp unit** and the surroundings are cooled enough.
- Prepare a Phillips-head screwdriver.
- Contact an Authorized Service Center to purchase a replacement **Lamp unit** (ET-LAF100).
- When the projector is mounted in the ceiling, do not work directly under the projector or put your face closer to the projector.

NOTE:
- Prior to replacing the lamp unit, allow it to cool down to prevent the risk of burns, damage and other hazards.
- Do not attempt replacement with an unauthorized lamp unit.

When to replace the Lamp unit

The **Lamp unit** is consumable and the brightness decreases by duration of usage. The **LAMP** indicator will inform you of the replacement timing at 4 800 hours, and at 5 000 hours, the projector will be turned off. Those figures are rough guidance and might be shortened by the usage conditions, characteristics of the **Lamp unit**, environmental conditions, and so on. You can check the duration of usage time using **LAMP RUNTIME** in the **OPTION** menu.

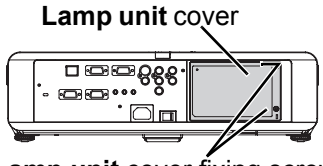
<table>
<tr><th>Indication</th><td>On screen
  </td><td>LAMP indicator
 </td></tr>
<tr><th>Over 4 800 hours</th><td>"REPLACE LAMP" is displayed on the upper left of the screen for 30 seconds.</td><td rowspan="2">Illuminates RED.</td></tr>
<tr><th>Over 5 000 hours</th><td>"REPLACE LAMP" is displayed on the upper left of the screen, and it will stay until you respond.
To clear the screen, press any button.</td></tr>
</table>

NOTE:
- The guide times, 4 800 and 5 000 hours, are rough estimates based on certain conditions and is not a guaranteed time.
- For more information about the **Lamp unit**, such as guaranteed time, see the instructions which is provided with the **Lamp unit**.

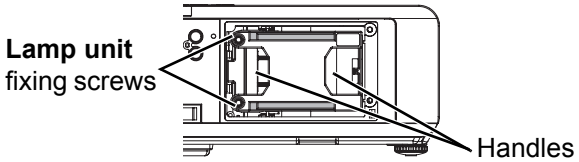
Replacement procedure

Removing and replacing the lamp unit

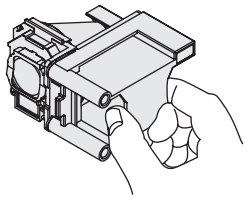
1. Use a Phillips-head screwdriver to loosen the 2 **Lamp unit cover** fixing screws on the back of the projector until the screws turn freely, and remove the **Lamp unit cover**.



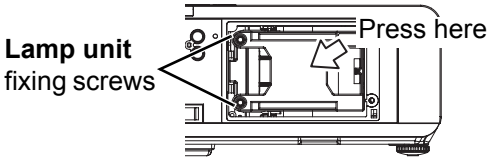
2. Use a Phillips-head screwdriver to loosen the 2 **Lamp unit** fixing screws.
3. Hold the handles of the **Lamp unit** and release the lamp unit lock.
4. Pull the used **Lamp unit** gently from the projector.



5. Replace the new **Lamp unit** in correct direction.



6. Press in the **Lamp unit** until it clicks and make sure the unit is installed securely.
7. Tighten the 2 **Lamp unit** fixing screws securely with a Phillips-head screwdriver.



8. Attach the **Lamp unit cover** and tighten the 2 **Lamp unit cover** fixing screws securely with a Phillips-head screwdriver.
   - **LAMP RUNTIME** will be reset to “0” automatically.

Ceiling mount bracket safeguards

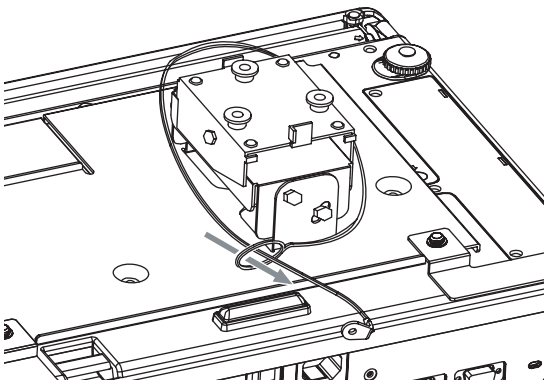
The projector and the ceiling mount bracket are designed sufficiently safety though, make sure the safety cable provided with the projector is installed and attached to the bottom of the projector when mounting in the ceiling for safety and security.

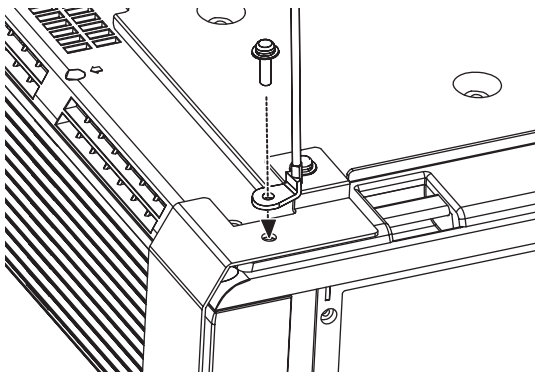
NOTE:

- Even if it is guarantee period, the manufacturer is not responsible for any hazard or damage caused by using a ceiling mount bracket which is not purchased from an authorized distributors, or environmental conditions.
- Make sure to use a torque driver and do not use an electrical screwdriver or an impact screwdriver.
- Installation work of the ceiling mount bracket should only be carried by a qualified technician.
- Remove an unused ceiling mount bracket promptly.

Installing the safety cable

1. Install the ceiling mount bracket according to the installation instructions.
2. Loop the security cable around the ceiling mount bracket with less slack.
   - Lace the cable of the end with a latch through the loop on the other end of the cable.
3. Attach the latch on to the bottom of the projector with a provided screw.
   - Torque: 1.25±0.2 N·m





* Indicated above is ET-PKF100S.

Troubleshooting

Should any problem persist, contact your dealer.

Problem	Cause	Reference page
Power does not turn on.	● The power cord may not be connected. ● The **MAIN POWER** switch is turned off. ● No electric supply is at the wall socket. ● **TEMP** indicator is lit or flashes. ● **LAMP** indicator is lit or flashes. ● The lamp unit cover has not been securely installed. ● The circuit breakers have tripped.	20 21 20 39 39 42 -
No picture appears.	● The video signal input source may not be connected to a terminal properly. ● The input selection setting may not be correct. ● The **BRIGHTNESS** adjustment setting may be at the minimum setting. ● The signal input source may not be operating properly. ● The **SHUTTER** function may be in use. ● The **ARF** is removed or installed incorrectly.	19 24 30 - 25 40
The picture is fuzzy.	● The lens focus may not have been set correctly. ● The projector may not be at the correct distance from the screen. ● The lens may be dirty. ● The projector may be tilted too much.	22 14 9 16
The color is pale or greyish.	● **COLOR** or **TINT** adjustment may be incorrect. ● The input source which is connected to the projector may not be adjusted correctly.	30 28
No sound can be heard from the internal speaker.	● The audio signal source may not be connected properly. ● A cable may be connected to the **VARIABLE AUDIO OUT** terminal. ● The volume adjustment may be at the lowest possible setting.	18 13 26
The control buttons of the projector do not operate.	● **CONTROL PANEL** in **OPTION** menu is invalidated. If you have a loss of the **Remote control** while the **CONTROL PANEL** is invalidated, press and hold the **MENU** button for 2 seconds with pressing the **ENTER** button.	35
The Remote control does not operate.	● The batteries may be weak. ● The batteries may not have been inserted correctly. ● The remote control signal receptor on the projector may be obstructed. ● The remote control unit may be out of the operation range. ● The **LASER** button is deactivated.	- 11 23 23 24
The picture does not display correctly.	● The signal format (**TV-SYSTEM**) may not have been set correctly. ● There may be a problem with the VCR or other signal source. ● A signal which is not compatible with the projector is being input.	31 - 44
Picture from a computer does not appear.	● The cable may be longer than the optional cable. ● The external video output from a laptop computer may not be correct. (You may be able to change the external output settings by pressing the [Fn] + [F3] or [Fn] + [F10] keys simultaneously. The actual method varies depending on the type of computer; refer to the documentation provided with your computer for further details.) ● **COMPUTER2 SELECT** setting in **OPTION** menu is not correct.	- 46 34

Technical Information

List of compatible signals

Mode	Display resolution (dots)*1	Scanning frequency		Dot clock frequency (MHz)	Picture quality*2	Terminals
		H (kHz)	V (Hz)			
NTSC/NTSC 4.43/ PAL-M/PAL60	720 x 480i	15.7	59.9	-	A	VIDEO/S-VIDEO
PAL/PAL-N/SECAM	720 x 576i	15.6	50.0	-	A	
480i	720 x 480i	15.7	59.9	13.5	A	COMPONENT/ COMPUTER*3
576i	720 x 576i	15.6	50.0	13.5	A	
480p	720 x 483	31.5	59.9	27.0	A	
576p	720 x 576	31.3	50.0	27.0	A	
1 080/60i	1 920 x 1 080i	33.8	60.0	74.3	A	
1 080/50i	1 920 x 1 080i	28.1	50.0	74.3	A	
720/60p*4	1 280 x 720	45.0	60.0	74.3	A	
720/50p	1 280 x 720	37.5	50.0	74.3	A	
VESA	640 x 400	31.5	70.1	25.2	A	COMPUTER
	640 x 400	37.9	85.1	31.5	A	
VGA480	640 x 480	31.5	59.9	25.2	A	
	640 x 480	35.0	66.7	30.2	A	
	640 x 480	37.9	72.8	31.5	A	
	640 x 480	37.5	75.0	31.5	A	
	640 x 480	43.3	85.0	36.0	A	
SVGA	800 x 600	35.2	56.3	36.0	A	
	800 x 600	37.9	60.3	40.0	A	
	800 x 600	48.1	72.2	50.0	A	
	800 x 600	46.9	75.0	49.5	A	
	800 x 600	53.7	85.1	56.3	A	
MAC	832 x 624	49.7	74.6	57.3	A	
XGA	1 024 x 768	39.6	50.1	51.9	AA	
	1 024 x 768	48.4	60.0	65.0	AA	
	1 024 x 768	56.5	70.1	75.0	AA	
	1 024 x 768	60.0	75.0	78.8	AA	
	1 024 x 768	68.7	85.0	94.5	AA	
MXGA	1 152 x 864	64.0	71.2	94.2	A	
	1 152 x 864	67.5	74.9	108.0	A	
	1 152 x 864	76.7	85.0	121.5	B	
MAC	1 152 x 870	68.7	75.1	100.0	A	
MSXGA	1 280 x 960	60.0	60.0	108.0	A	
SXGA	1 280 x 1 024	64.0	60.0	108.0	A	
	1 280 x 1 024	80.0	75.0	135.0	B	
	1 280 x 1 024	91.1	85.0	157.5	B	
SXGA60+	1 400 x 1 050	64.0	60.0	108.0	A	
	1 400 x 1 050	65.1	59.9	122.4	B	
UXGA	1 600 x 1 200	75.0	60.0	162.0	B	
WXGA768	1 280 x 768	39.6	49.9	65.3	A	
	1 280 x 768	47.8	59.9	79.5	A	
WXGA800	1 280 x 800	41.3	50.0	68.0	A	
	1 280 x 800	49.1	60.2	69.1	A	
	1 280 x 800	49.7	59.8	83.5	A	
WXGA+	1 440 x 900	55.9	59.9	106.5	A	
WSXGA+	1 680 x 1 050	65.3	60.0	146.3	B	
WUXGA	1 920 x 1 200	74.6	59.9	193.3	B	

*1. The “i” appearing after the resolution indicates an interlaced signal.

*2. The following symbols are used to indicate picture quality.

AA Maximum picture quality can be obtained.

A Signals are converted by the image processing circuit before picture is projected.

B Some loss of data occurs to make projection easier.

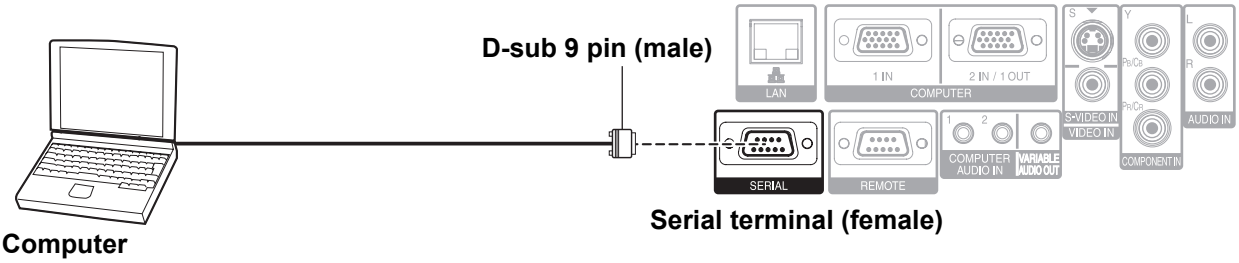
*3. $Y P_B P_R$ signals are available with COMPONENT terminal, and RGBHV signals are available with COMPUTER terminals.

*4. 720/60p or 720/50p COMPUTER signals will be projected as WIDE720/60 or WIDE720/50.

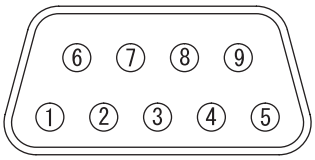
Serial terminal

The serial connector which is on the connector panel of the projector conforms to the RS-232C interface specification, so that the projector can be controlled by a personal computer which is connected to this connecter.

Connection



Pin assignments and signal names



Pin No.	Signal name	Contents
①		NC
②	TXD	Transmitted data
③	RXD	Received data
④		NC
⑤	GND	Earth
⑥		NC
⑦	RTS	Connected internally
⑧	CTS	
⑨		NC

Communication settings

Signal level	RS-232C	**Character length**	8 bits
Sync. method	Asynchronous	**Stop bit**	1 bit
Baud rate	9 600 bps	**X parameter**	None
Parity	None	**S parameter**	None

Basic format

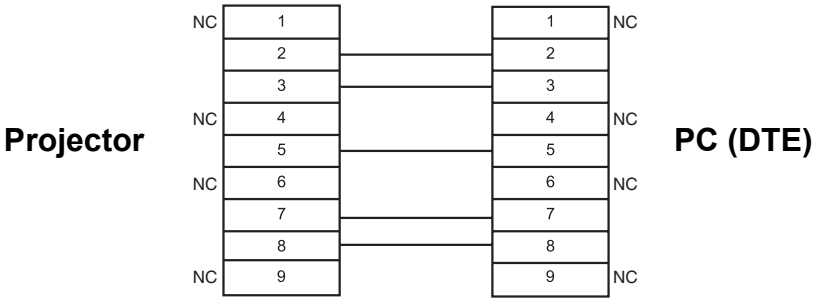
STX	Command	:	Parameter	ETX
Start byte (02h)	3 bytes	1 byte	1 byte - 4 bytes	End (03h)

The data streaming from the computer will start with STX, and proceed to Command, Parameter and end with ETX. You can add the required parameter.

- The projector can not receive any command for 10 seconds after the lamp is switched on. Wait 10 seconds before sending the command.
- If sending multiple commands, check that a response has been received from the projector for one command before sending the next command.
- When a command which does not require parameters to be sent, the colon (:) is not required.
- If an incorrect command is sent from the personal computer, the ER401 command will be sent from the projector to the personal computer.

Cable specifications

(When connected to a personal computer)



Control commands

Command	Control contents	Remarks
PON	Power ON	In standby mode, all commands other than the PON command are ignored. ● The PON command is ignored during lamp ON control. If a PON command is received while the cooling fan is operating after the lamp has switched off, the lamp is not turned back on again straight away in order to protect the lamp.
POF	Power OFF	
AVL	Volume	Parameter 000 - 063 (Adjustment value 0 - 63)
IIS	INPUT	Parameter: VID = VIDEO SVD = S-VIDEO RG1 = COMPUTER1 RG2 = COMPUTER2 YUV = COMPONENT NWP = NETWORK (PT-F200NTU only)
Q$S	Lamp condition query	Call back 0 = Standby 2 = Lamp ON 1 = Lamp ON control active 3 = Lamp OFF control active
OSH	SHUTTER	Turning off the projection temporarily. Send the command to switch between ON and OFF. Do not send the command consecutively.

Computer connection guidance

You can switch the signals which to output from the **COMPUTER1 OUT** terminal by pressing the computer key command. The key commands are depend on the manufactures. If you select the computer terminals which has no signals while the **INPUT GUIDE** is set to **DETAILED**, the computer connection guidance will be displayed.

Manufacturer	Key command	Manufacturer	Key command	Manufacturer	Key command
Panasonic NEC	Fn + F3	TOSHIBA SHARP HP	Fn + F5	IBM SONY	Fn + F7
				Apple	F7
FUJITSU	Fn + F10	EPSON DELL	Fn + F8	Other	Fn + □/⧉

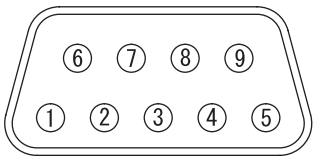
NOTE:

- The computer connection guidance will disappear after 5 minutes.
- Please refer the instructions which provided with the computers for more detailed information.

REMOTE terminal

You can remotely operate the projector from the outside the **Remote control** range by connecting to the **REMOTE** terminal.

Pin assignments and signal names



Pin No.	Signal name	Contents
①	GND	Ground
②	POWER	POWER ON
③	INPUT SEL3	Select input signal 3
④		NC
⑤	INPUT SEL1	Select input signal 1
⑥	INPUT SEL2	Select input signal 2
⑦		Connect internally
⑧		
⑨	ENABLE	Control by external contact

LAMP switching

Pin No.	Settings	
② - ①	Short	Open
Operation	On	Off

Switching input signals

Pin No.	Settings					
③ - ①	Open	Open	Short	Short	Short	Open
⑤ - ①	Open	Short	Open	Open	Short	Short
⑥ - ①	Open	Open	Short	Open	Open	Short
Input signal	COMPUTER1	COMPUTER2	COMPONENT	VIDEO	S-VIDEO	NETWORK (PT-F200NTU only)

NOTE:

- When pin ① and pin ⑨ are short-circuited, the buttons on the projector's control panel, **POWER** and **INPUT SELECT** buttons on the **Remote control** cannot be used. In addition, the RS-232C commands and network functions that correspond to these functions cannot be used either.
- While pin ⑨ is "Open", do not short-circuit pin ①, ②, ③, ⑤ and ⑥. The projector would reject all the signals from the **Remote control**.

Specifications

Power supply		AC 100 - 240 V 50 Hz/60 Hz	
Power consumption		330 W During standby (when fan is stopped): 3.5 W	
Amps		3.9 A - 1.4 A	
LCD panel	**Panel size (diagonal)**	0.7 type (17.78 mm)	
	Aspect ratio	4 : 3	
	Display method	3 transparent LCD panels (RGB)	
	Drive method	Active matrix method	
	Pixels	786 432 (1 024 x 768) x 3 panels	
Lens		Manual zoom (2x)/Manual focus F 1.7 - 2.6, f 21.6 mm - 43.0 mm	
Lamp		UHM lamp (250 W)	
Luminosity[*1]		3 500 lm	
Operating environment		Temperature	0 °C - 40 °C (32 °F - 104 °F) When the **ALTITUDE** (page 35) is set to **HIGH**: 0 °C - 35 °C (32 °F - 95 °F)
		Humidity	20% - 80% (no condensation)
Scanning frequency[*2] **(for RGB signal)**	**Horizontal scanning frequency**	15 kHz - 91 kHz	
	Vertical scanning frequency	50 Hz - 85 Hz	
	Dot clock frequency	Less than 110 MHz	
COMPONENT (YPBPR) signals		525i (480i), 525p (480p), 625i (576i), 625p (576p), 750 (720)/60p, 750 (720)/50p, 1 125 (1 080)/60i, 1 125 (1 080)/50i	
Color system		7 (NTSC/NTSC 4.43/PAL/PAL-M/PAL-N/PAL60/SECAM)	
Projection size		33" - 300" (838.2 mm - 7 620 mm)	
Throw distance		1.2 m - 18.1 m (3'11" - 59'4")	
Screen aspect ratio		4 : 3	
Installation		FRONT/DESK, FRONT/CEILING, REAR/DESK, REAR/CEILING (Menu selection method)	
Speaker		1 piece	4 cm (1 - 9/16")
Max. usable volume output		3.0 W	

*1. Measurement, measuring conditions and method of notation all comply with ISO21118 international standards.
*2. See “List of compatible signals” on page 44 for available signals.

Terminals	S-VIDEO IN	Single - line, Mini DIN 4p Y: 1.0 V [p-p], C: 0.286 V [p-p], 75 Ω	
	VIDEO IN	Single - line, RCA pin jack 1.0 V [p-p], 75Ω	
	COMPUTER1 IN	Single - line, D - sub HD 15-pin (female)	
		R.G.B.	0.7 V [p-p], 75 Ω
		HD, VD/SYNC	TTL high impedance, automatic positive/negative polarity compatible
	COMPUTER2 IN/ 1 OUT	Single - line, D - sub HD 15-pin (female) Selectable for input and output by menu operation.	
		R.G.B.	0.7 V [p-p], 75 Ω
		HD, VD/SYNC	TTL high impedance, automatic positive/negative polarity compatible
	COMPONENT IN	Y, PB/CB, PR/CR	Single - line, RCA pin jack x 3
		Y:	1.0 V [p-p] (including sync), 75 Ω
		PB/CB, (PR/CR)	0.7 V [p-p], 75 Ω
	AUDIO IN	Single - line, 0.5V [rms], RCA pin jack x 2 (L - R)	
	COMPUTER AUDIO IN	Dual - line, 0.5V [rms], M3 jack (Stereo MINI)	
	VARIABLE AUDIO OUT	Single - line, 0.5V [rms], M3 jack (Stereo MINI) Monitor output/stereo compatible 0 V [rms] - 2.0 V [rms] (variable)	
	SERIAL	D-sub 9-pin RS-232C compatible	
	REMOTE	D-sub 9-pin	For external control
	LAN (RJ-45) (PT-F200NTU only)	Single - line, For network connection 10 Base-T/100Base-TX/1000Base-T	
Wireless LAN (PT-F200NTU only)	Compatible	IEEE802.11b/IEEE802.11g (Wireless LAN standard protocol)	
	Wireless channel	IEEE802.11b/IEEE802.11g: 1 - 11 channels	
	Distance	30 m (98'5") Depends on the usage environment	
Cabinet		Moulded plastic (PC+ABS)	
Dimensions		Width	432 mm (17")
		Height	124.5 mm (4 - 7/8")
		Length	319 mm (12 - 17/32")
Weight		6.2 kg (13.7 lbs.)	
Certifications		UL60950-1 FCC Class B	C-UL ICES-003
Remote control	Power supply	3 V DC (AA battery x 2)	
	Operating range	Approx. 15 m (49'2") (when operated directly in front of signal receptor)	
	Weight	117 g (4.2 ozs.) (including batteries)	
	Dimensions	Width	48 mm (1 - 7/8")
		Length	163 mm (6 - 13/32")
		Height	24.5 mm (-15/16") (not including surface projection parts)
Options	Ceiling bracket	ET-PKF100H/ET-PKF100S	

Screen size and throw distance for 16:9 aspect ratio

Projection size (16 : 9)			Throw distance (L)	
Screen Diagonal (SD)	Screen height (SH)	Screen width (SW)	Minimum distance (LW)	Maximum distance (LT)
(0.84 m) 33"	0.41 m (1'4")	0.73 m (2'4")		2.1 m (6'10")
(1.02 m) 40"	0.50 m (1'7")	0.89 m (2'11")	1.3 m (4'3")	2.6 m (8'6")
(1.27 m) 50"	0.62 m (2')	1.11 m (3'7")	1.6 m (5'2")	3.2 m (10'5")
(1.52 m) 60"	0.75 m (2'5")	1.33 m (4'4")	1.9 m (6'2")	3.9 m (12'9")
(1.78 m) 70"	0.87 m (2'10")	1.55 m (5'1")	2.3 m (7'6")	4.6 m (15'1")
(2.03 m) 80"	1.00 m (3'3")	1.77 m (5'9")	2.6 m (8'6")	5.2 m (17')
(2.29 m) 90"	1.12 m (3'8")	1.99 m (6'6")	2.9 m (9'6")	5.9 m (19'4")
(2.54 m) 100"	1.25 m (4'1")	2.21 m (7'3")	3.3 m (10'9")	6.5 m (21'3")
(3.05 m) 120"	1.49 m (4'10")	2.66 m (8'8")	3.9 m (12'9")	7.9 m (25'11")
(3.81 m) 150"	1.87 m (6'1")	3.32 m (10'10")	4.9 m (16')	9.8 m (32'1")
(5.08 m) 200"	2.49 m (8'2")	4.43 m (14'6")	6.6 m (21'7")	13.1 m (42'11")
(6.37 m) 250"	3.11 m (10'2")	5.53 m (18'1")	8.3 m (27'2")	16.4 m (53'9")
(7.62 m) 300"	3.74 m (12'3")	6.64 m (21'9")	9.9 m (32'5")	19.7 m (64'7")

* All measurements above are approximate and may differ slightly from the actual measurements.

Calculation methods for screen dimensions

You can calculate more detailed screen dimension from the screen diagonal.

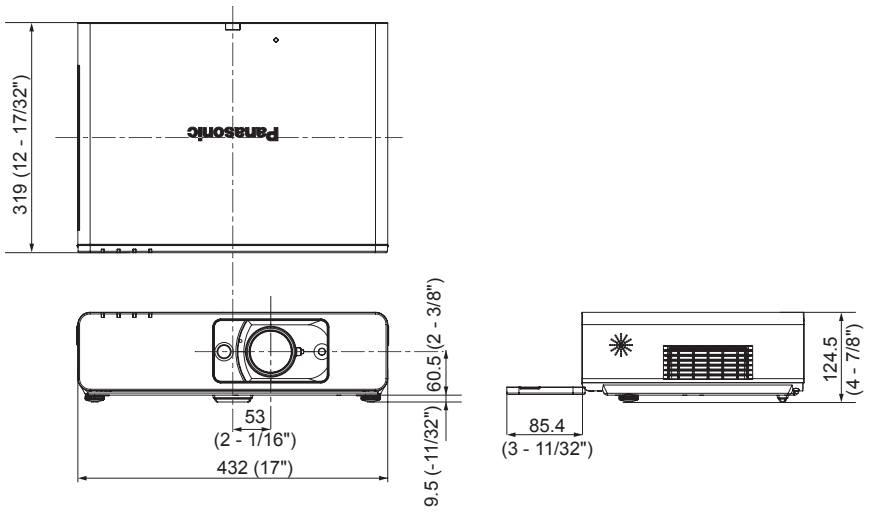
SW (m) = SD (") x 0.0221 **SH (m) = SD (") x 0.0125**

LW (m) = 0.0332 x SD (") - 0.049 **LT (m) = 0.066 x SD (") - 0.055**

* The results above are approximate and may differ slightly from the actual measurements.

Dimensions

Unit: mm



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- S-VGA is a registered trademark of the Video Electronics Standards Association.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
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Avis important concernant la sécurité

Cher client Panasonic:

Il est important de lire et comprendre les informations suivantes car elles fournissent des détails qui vous permettront d'utiliser le projecteur sans danger pour vous et votre environnement, conformément aux dispositions légales relatives à l'utilisation de projecteurs. Avant de brancher, utiliser ou régler ce projecteur, veuillez lire toute la notice puis la conserver avec le projecteur pour vous y référer ultérieurement. Nous espérons qu'elle vous aidera à optimiser l'utilisation de votre nouveau produit et que vous serez satisfait de votre projecteur LCD Panasonic. Le numéro de série de votre produit se trouve sous le projecteur. Veuillez le noter dans l'espace ci-dessous prévu à cet effet et conserver cette notice en cas de maintenance requise.

Numéro de modèle: **PT-F200NTU / PT-F200U**

Numéro de série:

AVERTISSEMENT: POUR REDUIRE LES RISQUES DE FEU OU DE CHOC ÉLECTRIQUE, NE PAS EXPOSER CE PRODUIT À L'EAU OU À L'HUMIDITÉ.

Alimentation: Ce projecteur LCD est conçu pour fonctionner sur secteur de 100 V - 240 V, 50 Hz/60 Hz seulement.

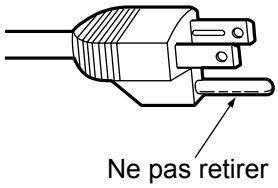
ATTENTION: Le cordon d'alimentation secteur fourni avec le projecteur peut être utilisé uniquement pour une alimentation électrique de 125 V, 7 A maximum. Si on veut l'utiliser avec une tension ou un courant plus forts, on doit se procurer un autre cordon d'alimentation de 250 V. Si on utilise le cordon fourni sous ces conditions, risque de provoquer un incendie.

WARNING
RISK OF ELECTRIC SHOCK. DO NOT OPEN
MISE EN GARDE-RISQUE DE CHOC ÉLECTRIQUE. NE PAS OUVRIR.
WARNUNG- ZUR VERMEIDUNG EINES ELEKTRISCHEN SCHLAGES GERÄT NICHT ÖFFNEN.

Le symbole de la flèche en forme d'éclair, dans un triangle, avertit l'usager de la présence de «tensions dangereuses» à l'intérieur du produit qui peuvent être de force suffisante pour constituer un risque de choc électrique aux personnes.

Le point d'exclamation dans un triangle avertit l'usager de la présence d'instructions importantes concernant l'utilisation et l'entretien (réparation) dans la littérature accompagnant le produit.

ATTENTION: Cet appareil est équipé d'une fiche de courant à trois broches avec mise à la terre. Ne pas retirer la broche de mise à la masse de la fiche. Cette fiche ne pourra être utilisée que dans une prise avec mise à la terre. Ceci est une précaution sécuritaire. S'il est impossible d'insérer la fiche dans la prise, s'adresser à un électricien. Ne pas annuler la protection de la fiche à mise à la terre.



Pursuant to at the directive 2004/108/EC, article 9(2)
Panasonic Testing Centre
Panasonic Service Europe, a division of Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, F.R. Germany

NOTICE:

- Ce produit possède une lampe à décharge haute intensité (DHI) qui contient du mercure. Son élimination peut être réglementée dans votre s à cause de considérations environnementales. Pour d'amples informations sur la mise au rebut ou le recyclage, veuillez contacter vos autorités locales ou aller au site Web de l'Electronics Industries Alliance: http://www.eiae.org

Avis important concernant la sécurité

AVERTISSEMENT:
Cet équipement a été soumis à des tests qui ont démontré que celui-ci respectait les limites spécifiées pour les appareils numériques de la classe B aux termes de la partie 15 des règles de la FCC (Federal Communications Commission U.S.A.). Ces limites ont pour objet de fournir une protection raisonnable contre les interférences nuisibles dans le cas d'une installation en milieu résidentiel. Cet équipement produit, utilise et peut rayonner de l'énergie de haute fréquence, et s'il n'est pas installé et utilisé conformément aux instructions fournies avec celui-ci, peut provoquer des interférences nuisibles aux communications radio. En outre, même en cas d'utilisation conforme, il n'est pas garanti qu'aucune interférence ne saurait survenir avec certaines installations. Si cet équipement s'avère nuire à la bonne réception d'émissions de radiophonie ou de télévision, ce que l'on pourra déterminer en mettant l'équipement successivement hors tension puis sous tension, il est conseillé de tenter de remédier au problème par l'une des méthodes suivantes:

- Réorientez ou déplacez l'antenne du récepteur;
- Éloignez l'équipement du récepteur;
- Branchez l'équipement dans une prise de courant située sur un circuit autre que celui qui alimente la prise de courant du récepteur;
- Demandez conseil à votre distributeur ou à un technicien de radio/télévision expérimenté.

ATTENTION: Pour assurer la bonne conformité, utilisez uniquement des câbles d'interface blindés lorsque vous connectez des ordinateurs ou des périphériques. Toute modification non autorisée de cet équipement annulera le droit de l'utilisateur à utiliser cet équipement.
Si le port sériel est utilisé pour connecter un ordinateur personnel afin de commander le projecteur depuis l'extérieur, il faut utiliser le câble d'interface sériel en option RS-232C avec une âme en ferrite. Tout changement ou modification non autorisé à cet équipement annule l'autorité de faire fonctionner cet appareil.

Avertissement de la FCC relative à l'exposition RF : (si fourni avec un appareil sans fil)

- Cet équipement est conforme aux limitations concernant l'exposition aux radiations établies par la FCC dans un environnement non contrôlé.
- Cet équipement a été approuvé pour un fonctionnement mobile et requiert de respecter une distance minimum de 20 cm entre l'antenne(s) et toutes les parties de votre corps (sauf les extrémités des mains, poignets et pieds) durant les modes de fonctionnement sans fil.
- Cet équipement ne peut pas être utilisé avec d'autres transmetteurs installés, qui peuvent être capable de transmission simultanée.

AVERTISSEMENT:

- Ne peut être utilisé dans une salle d'ordinateurs telle que définie dans la norme ANSI/NFPA 75 Standard for Protection of Electronic Computer/Data Processing Equipment.
- Pour l'équipement branché en permanence, un dispositif de dis connexion d'accès facile doit être incorporé dans le câble d'installation du bâtiment;
- Pour l'équipement bran chable, une prise secteur d'accès facile doit être installée près de l'équipement.

Déclaration de conformité

Modèle n°:	PT-F200NTU / PT-F200U
Désignation commerciale:	**Panasonic**
Fabricant responsable:	Panasonic Corporation of North America
Adresse:	One Panasonic Way, Secaucus, New Jersey 07094
Téléphone:	(888) 411 - 1996
Email:	projectorsupport@us.panasonic.com

Cet appareil est conforme à la partie 15 des règles de la FCC (Federal Communicaitions Commission U.S.A.) ce qui signifie: (1) que l'appareil ne produit pas d'interférences nuisibles, et (2) que l'appareil est capable de supporter sans danger les interférences reçues, y compris celles susceptibles de perturber son fonctionnement.

Informations sur l'évacuation des déchets dans les pays ne faisant pas partie de l'Union européenne

Ce symbole n'est reconnu que dans l'Union européenne. Pour vous débarrasser de ce produit, veuillez contacter les autorités locales ou votre revendeur afin de connaître la procédure d'élimination á suivre.

Précautions de sécurité

AVERTISSEMENTS

Si l'on remarque une émission de fumée, d'odeurs suspectes ou de bruits provenant du projecteur, débrancher la fiche du cordon d'alimentation de la prise de courant.

- Ne pas continuer d'utiliser le projecteur dans ces cas-là, autrement cela peut entraîner un incendie ou des chocs électriques.
- Après s'être assuré que de la fumée ne se dégage plus, s'adresser à un centre technique agréé et demander que les réparations nécessaires soient faites.
- Le fait de réparer le projecteur soi-même est très dangereux, et ne doit jamais être fait.

Ne pas installer ce projecteur dans un endroit qui n'est pas assez résistant pour supporter le poids du projecteur.

- Si l'emplacement d'installation n'est pas assez résistant, le projecteur risque de tomber et causer de graves blessures et (ou) des dommages.

Demander à un technicien qualifié d'installer le projecteur par exemple s'il est installé au plafond.

- Si l'installation n'est pas faite correctement, cela peut entraîner des blessures ou des chocs électriques.
- Ne pas utiliser un support de montage au plafond qui n'est pas agréé.

Si de l'eau ou des objets étrangers pénètrent dans le projecteur, si le projecteur tombe, ou si le boîtier est endommagé, débrancher immédiatement la fiche du cordon d'alimentation de la prise de courant.

- Si l'on continue d'utiliser le projecteur dans cette condition, cela peut entraîner un incendie ou des chocs électriques.
- S'adresser à un centre technique agréé pour que les réparations nécessaires puissent être faites.

Ne pas surcharger la prise de courant.

- Si l'alimentation est surchargée (par exemple, par l'utilisation de trop d'adaptateurs), cela risque de faire surchauffer le projecteur et peut entraîner un incendie.

Ne jamais entreprendre toute modification quelconque ou démontage du projecteur.

- Des hautes tensions qui peuvent causer de graves blessures sont présentes à l'intérieur du projecteur.
- Pour toute inspection, réglage ou réparation, s'adresser à un centre technique agréé.

Nettoyer la fiche du cordon d'alimentation régulièrement afin d'éviter toute accumulation de poussière.

- Si de la poussière s'accumule sur la fiche du cordon d'alimentation, l'humidité peut endommager l'isolant et entraîner un incendie. Débrancher la fiche du cordon d'alimentation de la prise de courant et l'essuyer avec un tissu sec.
- Si le projecteur n'est pas utilisé pendant une période prolongée, débrancher la fiche du cordon d'alimentation de la prise de courant.

Faire attention à ne pas endommager le cordon d'alimentation.

- Ne pas endommager le cordon d'alimentation, ne pas le modifier, ne pas le placer sous des objets lourds, ne pas le chauffer, ne pas le placer près d'objets chauffants, ne pas le tordre, ne pas le plier ou le tirer excessivement et ne pas le rouler en boule.
- Si le cordon d'alimentation est endommagé, cela peut entraîner un incendie et des chocs électriques.
- Si le cordon d'alimentation est endommagé, le faire réparer par un centre technique agréé.

Ne pas manipuler le cordon d'alimentation avec les mains mouillées.

- Cela peut entraîner des chocs électriques.

Brancher la fiche du cordon d'alimentation fermement dans la prise de courant.

- Si la fiche n'est pas complètement insérée, cela peut entraîner des chocs électriques ou la faire surchauffer.
- Si la fiche est endommagée ou la plaque de la prise desserrée, celles-ci ne devraient pas être utilisées.

Ne pas placer le projecteur sur des surfaces instables.

- Si le projecteur est placé sur une surface qui est inclinée ou instable, il risque de tomber ou de se renverser et cela peut causer des blessures ou des dommages.

Ne pas placer le projecteur dans l'eau ou ne pas le aisser se mouiller.

- Sinon cela peut causer un incendie ou des chocs électriques.

Ne pas placer le projecteur sur des matériaux comme du tapis ou du tissu éponge.

- Cela peut provoquer une surchauffe du projecteur, pouvant entraîner des brûlures, un incendie ou endommager le projecteur.

Ne pas placer des récipients de liquide sur le projecteur.

- Si de l'eau se renverse sur le projecteur ou pénètre dans celui-ci, il y aura risque d'incendie ou d'électrocution.
- Si de l'eau entre à l'intérieur du projecteur, entrer en contact avec un centre technique agréé.

Ne pas mettre d'objets étrangers dans le projecteur.

- Ne pas insérer d'objets métalliques ou inflammables dans les orifices de ventilation ou les faire tomber sur le projecteur, car cela peut causer un incendie ou des chocs électriques.

Veiller à ce que les bornes + et – des piles n'entrent pas en contact avec des objets métalliques tels que colliers ou épingles à cheveux.
- Sinon, les piles risquent de fuir, de surchauffer, d'exploser ou de prendre feu.
- Ranger les piles dans un sac en plastique, et ne pas les ranger à proximité d'objets métalliques.

Ne pas toucher le liquide provenant des fuites des piles.
- Si vous touchez le liquide des fuites, cela pourrait abîmer votre peau. Enlever le liquide a l'eau claire et rechercher immédiatement le secours d'un médecin.
- Si vous recevez du liquide des fuites dans les yeux, cela pourrait provoquer la cécité ou des blessures. Ne pas vous frotter les yeux, enlever le liquide a l'eau claire et rechercher immédiatement le secours d'un médecin.

Pendant un orage, ne pas toucher le projecteur ou le câble.
- Il y a risque d'électrocution.

Ne pas utiliser l'appareil dans un bain ou une douche.
- Il y a risque d'incendie ou d'électrocution.

Veillez à ce que le faisceau lumineux n'éclaire pas directement votre peau pendant que vous utilisez le projecteur.
- Une lumière intense est émise par l'objectif du projecteur. Si vous vous placez dans ce faisceau lumineux, celui-ci risquera de vous blesser ou de vous abîmer la peau.

Ne pas regarder directement dans l'objectif pendant que le projecteur fonctionne.
- Une lumière intense est émise par l'objectif du projecteur. Si l'on regarde directement dans cette lumière, elle risque de causer des blessures et de graves lésions aux yeux.
- Veiller particulièrement à ce que les enfants ne regardent pas dans l'objectif. En outre, éteindre le projecteur si on le laisse sans surveillance.

Ne pas placer les mains ou autres objets près de l'orifice de sortie d'air.
- De l'air chaud sort par l'orifice de sortie d'air. Ne pas placer les mains, le visage ou d'autres objets qui ne peuvent résister à la chaleur près de cette sortie d'air [laisser un espace d'au moins 50 cm], sinon des brûlures ou des dommages risqueraient de s'ensuivre.

Le remplacement de la lampe ne doit être effectué que par un technicien qualifié.
- La lampe a une pression interne élevée. Si elle est manipulée incorrectement, une explosion peut s'ensuivre.
- La lampe peut être facilement endommagée si elle est heurtée contre des objets durs ou si on la laisse tomber et des blessures et des mauvais fonctionnements peuvent s'ensuivre.

Lors du remplacement de la lampe, la laisser refroidir pendant au moins une heure avant de la manipuler.
- Le couvercle de la lampe devient très chaud, et on risque de se brûler si on le touche.

Avant de remplacer la lampe, veiller à débrancher la fiche du cordon d'alimentation de la prise de courant.
- Il y a risque d'électrocution ou d'explosion.

Ne pas laisser des enfants ou des animaux domestiques toucher la télécommande.
- Après avoir utilisé la télécommande, la ranger hors de portée des enfants ou des animaux domestiques.

MISES EN GARDE

Ne pas obstruer les orifices d'entrée et de sortie d'air.
- Cela risque de faire surchauffer le projecteur, et causer un incendie ou endommager le projecteur.
- Ne pas installer le projecteur dans des endroits étroits, mal ventilés tels que des placards ou des étagères.
- Ne pas placer le projecteur sur des tissus ou du papier, ces matériaux peuvent être aspirés dans l'orifice d'entrée d'air.

Débrancher toujours tous les câbles avant de déplacer le projecteur.
- Le fait de déplacer le projecteur avec des câbles branchés peut endommager les câbles, ce qui pourrait causer un incendie ou des chocs électriques.

Ne pas installer le projecteur dans des endroits humides ou poussiéreux ou dans des endroits où le projecteur peut entrer en contact avec des fumées grasses ou de la vapeur.
- L'utilisation du projecteur dans de telles conditions peut causer un incendie, des chocs électriques ou une détérioration du boîtier en plastique. Une détérioration du plastique risquerait en effet d'entraîner une chute du projecteur en cas d'installation au plafond.

Ne pas installer le projecteur dans un environnement a haute température, tel qu'a proximité d'un chauffage ou en plein soleil.
- Sinon cela peut causer un incendie, un dysfonctionnement ou une détérioration du plastique.

Précautions de sécurité

Pour débrancher le cordon d'alimentation, tenir la fiche et non pas le cordon.
- Si le cordon d'alimentation est tiré, le cordon sera endommagé et cela peut causer un incendie, des courts-circuits ou des chocs électriques sérieux.

Ne pas placer d'objets lourds sur le projecteur.
- Cela peut déséquilibrer le projecteur et le faire tomber, ce qui peut entraîner des dommages ou des blessures.

Ne pas court-circuiter, chauffer ou démonter les piles, et ne pas les mettre dans l'eau ou dans le feu.
- Sinon, les piles risqueront de surchauffer, de fuir, d'exploser ou de prendre feu, et donc de causer des brûlures ou d'autres blessures.

Lorsqu'on insère les piles, veiller à ce que les polarités (+ et –) soient bien respectées.
- Si l'on insère les piles incorrectement, elles risqueront d'exploser ou de fuir, ce qui peut causer un incendie, des blessures ou une contamination du logement des piles et de la zone environnante.

Utiliser uniquement les piles spécifiées.
- Si l'on insère des piles d'un type différent, elles risqueront d'exploser ou de fuir, ce qui peut causer un incendie, des blessures ou une contamination du logement des piles et de la zone environnante.

Ne pas mélanger des piles usées et des piles neuves.
- Si l'on insère les piles incorrectement, elles risqueront d'exploser ou de fuir, ce qui peut causer un incendie, des blessures ou une contamination du logement des piles et de la zone environnante.

Si l'on n'utilise pas le projecteur pendant une période prolongée, débrancher la fiche du cordon d'alimentation de la prise de courant et retirer les piles de la télécommande.
- Si de la poussière s'accumule sur la fiche du cordon d'alimentation, l'humidité ainsi créée risquera d'endommager l'isolation, ce qui peut provoquer un incendie.
- Le fait de laisser les piles à l'intérieur de la télécommande pendant trop longtemps en cas d'inactivité risque de causer une dégradation de l'isolation, une fuite de courant ou même des explosions, ce qui pourrait causer un incendie.

Ne pas peser de tout son poids sur ce projecteur.
- On risque de tomber ou de casser l'appareil, ce qui peut causer des blessures.
- Veiller tout particulièrement à ce que les enfants ne se tiennent pas debout ou ne s'asseyent pas sur le projecteur.

Retirer rapidement les piles de la télécommande.
- Si vous laissez des pile usagées dans la télécommande pendant une longue période, cela risque de provoquer des fuites, une hausse anormale de la température interne ou une explosion.

Si la lampe s'est cassée, ventiler immédiatement la pièce. Ne pas toucher ni approcher le visage des morceaux cassés.
- Le non respect de cette consigne peut entraîner l'absorption du gaz par l'utilisateur. Ce gaz se dégage lorsque la lampe est cassée et il contient presque autant de mercure qu'une lampe fluorescente, de plus les morceaux cassés peuvent provoquer des blessures.
- Si vous pensez avoir inhalé du gaz ou que du gaz a pénétré dans votre bouche ou dans vos yeux, contactez un médecin immédiatement.
- S'adresser au revendeur pour le remplacement de la lampe et l'inspection de l'intérieur du projecteur.

Débrancher la fiche du cordon d'alimentation de la prise de courant comme mesure de sécurité avant d'effectuer tout nettoyage.
- Sinon cela peut causer des chocs électriques.

Demander à un centre technique agréé de nettoyer l'intérieur du projecteur au moins une fois par an.
- S'il n'est pas nettoyé et que de la poussière s'accumule à l'intérieur du projecteur, cela peut causer un incendie ou des problèmes de fonctionnement.
- Il est recommandé de nettoyer l'intérieur du projecteur avant l'arrivée de la saison humide. Demander au centre technique agréé le plus proche de nettoyer le projecteur lorsque cela est requis. Se renseigner auprès du centre technique agréé pour le coût du nettoyage.

Nous faisons tous les efforts possibles afin de préserver l'environnement. Prière de rapporter l'appareil, s'il n'est pas réparable, à votre revendeur ou à un centre de recyclage.

Précautions lors du transport

Ne pas soumettre le projecteur à des vibrations ou des chocs excessifs.

- L'objectif du projecteur doit être manipulé avec soin.
- Placer le couvercle sur l'objectif lors du transport du projecteur.

Lors du transport du projecteur, bien le tenir par le bas.

- Ne pas tenir le projecteur par les pieds de réglage ou le couvercle supérieur pour le déplacer car cela pourrait l'endommager.

Précautions lors de l'installation

Éviter de l'installer dans les endroits sujets à des vibrations ou à des chocs.

- Les pièces internes peuvent être endommagées, ce qui peut causer des pannes ou des accidents.

Éviter d'installer le projecteur à des endroits sujets à des changements de température brusques, à proximité d'un climatiseur ou d'un matériel d'éclairage.

- La durée de vie de la lampe risquerait d'être réduite, ou le projecteur risquerait de s'éteindre. « Indicateur TEMP » à la page 41.

Ne pas installer le projecteur près de lignes d'alimentation électrique à haute tension ou de moteurs.

- Le projecteur peut être soumis à des interférences électromagnétiques.

Si le projecteur est installé au plafond, demander a un technicien qualifié de faire tous les travaux d'installation.

- Il faut acheter le kit d'installation séparé (numéro de modèle: ET-PKF100H, ET-PKF100S). En outre, tous les travaux d'installation doivent être exécutés uniquement par un technicien qualifié.
- Voir « Protections du support de montage au plafond » à la page 44 pour plus de détails à propos de l'installation du **Câble de sécurité**.

Si l'on utilise ce projecteur à un endroit élevé (au dessus de 1 400 m), régler MONTAGNE sur OUI. Voir « MONTAGNE » à la page 38.

- Le non-respect de ces consignes peut entraîner un dysfonctionnement ou peut raccourcir la durée de vie de la lampe ou d'autres composants.

Précautions lors de l'utilisation

Afin d'obtenir la meilleure qualité d'image

- Fermer les rideaux ou les volets de toutes les fenêtres et éteindre les lampes fluorescentes situées à proximité de l'écran afin que la lumière extérieure ou la lumière des lampes intérieures n'éclaire pas l'écran.

Ne pas toucher aux surfaces de l'objectif ou du verre avant avec les mains nues.

- Si la surface de l'objectif est salie par des empreintes digitales ou autre, celles-ci seraient agrandies et projetées sur l'écran. De plus, refermer le **Couvercle du panneau avant** lorsque le projecteur n'est pas utilisé.

Affichage à cristaux liquides

- Ne pas projeter la même image pendant une longue durée, car elle risquerait de former une après-image sur l'affichage à cristaux liquides.
- L'affichage à cristaux liquides du projecteur a été fabriqué en utilisant une technologie de haute précision afin d'offrir une image très détaillée. Il est possible que parfois quelques pixels figés apparaissent sur l'écran sous forme de points fixes bleus, verts ou rouges. Il est alors recommandé d'éteindre le projecteur puis de le rallumer environ 1 heure après. Bien noter que ceci n'affecte pas le bon fonctionnement de votre LCD.

Écran

- N'appliquer aucun produit volatil qui risque de décolorer l'écran, et veiller à ce que l'écran ne soit pas sale ou endommagé.

Le projecteur possede une lampe au mercure a haute pression interne avec les caractéristiques suivantes.

- La luminosité de la lampe dépend de la durée d'utilisation.
- Des chocs ou des écaillages sur la lampe pourraient la faire exploser ou écourter la durée de vie de la lampe.
- La lampe pourrait exploser occasionnellement apres l'utilisation du projecteur.
- La lampe pourrait exploser si le projecteur est utilisé apres le délai conseillé de remplacement de la lampe.
- La durée de vie de la lampe dépend des caractéristiques individuels de la lampe, des conditions d'utilisation et de l'environnement d'installation. L'utilisation consécutive pendant plus de 10 heures du projecteur ou de la commutation fréquente peuvent en particulier affecter considérablement la durée de vie de la lampe.

Composants optiques

- Si vous utilisez la lampe 6 heures consécutivement chaque jour, les composants optiques pourraient nécessiter un remplacement dans moins d'un an.

Remplacement de l'unité de la lampe

■ Avant de remplacer le l'Unité de la lampe

- Eteindre l'**ALIMENTATION PRINCIPALE** puis débrancher le cordon principal de la prise du secteur.
- Vérifier que l'**Unité de la lampe** ainsi que les pièces autour aient eu le temps de refroidir.
- Préparer un tournevis cruciforme.
- Contacter un centre de service aprés-vente agréé pour acheter une **L'Unité de la lampe** (ET-LAF100) de rechange.
- En cas d'installation du projecteur au plafond, ne jamais travailler directement dessous et éloigner le visage du projecteur.

REMARQUE:

- Avant de remplacer la lampe, la laisser refroidir pour éviter les risques de brûlures, les dommages et autres dangers.
- Ne pas essayer de la remplacer par une lampe non autorisée.

■ Délai de remplacement de l'Unité de la lampe

L'**Unité de la lampe** est un consommable et sa luminosité diminue avec la durée d'utilisation. L'indicateur **LAMPE** vous informera des délais de remplacement de 2800 heures, et coupera le projecteur à 3000 heures. Ces valeurs sont fournies avant tout à titre indicatif et peuvent être réduites en fonction des conditions d'utilisation réelles, des caractéristiques de l'**Unité de la lampe**, de la température ambiante, etc. Vous pouvez vérifier la durée d'utilisation avec la fonction **DURÉE DE LA LAMPE** dans le menu **OPTION**.

<table>
<tr><th>Indication</th><td>A l'écran
REMPLACER LA LAMPE</td><td>Indicateur LAMPE

</td></tr>
<tr><th>Plus de 2 800 heures</th><td>«LAMPE DE REMPLACEMENT» est affiché en haut à gauche de l'écran pendant 30 secondes.</td><td rowspan="2">S'allume en ROUGE.</td></tr>
<tr><th>Plus de 3 000 heures</th><td>«LAMPE DE REMPLACEMENT» s'affiche en haut à gauche de l'écran, et attend votre réponse.
Pour le supprimer immédiatement, appuyer sur n'importe quelle touche.</td></tr>
</table>

REMARQUE:

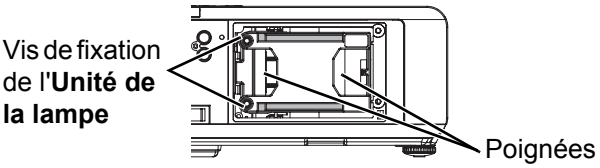
- Les durées indiquées, de 2800 et 3000 heures, sont des estimations basées sur certaines conditions et ne représentent en aucun cas des durées garanties.
- Pour plus d'informations à propos des caractéristiques de l'**Unité de la lampe**, telles que la durée de garantie, se reporter aux instructions fournies avec l'**Unité de la lampe**.
- Lorsque la durée d'utilisation de la lampe dépasse 3000 heures, le projecteur passera en mode de veille après environ 10 minutes d'utilisation.

■ Procédure de remplacement

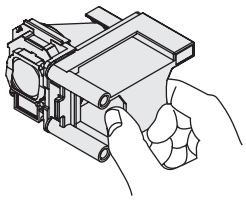
● Retirer et remplacer la lampe

1. Dévisser à l'aide d'un tournevis cruciforme les 2 vis de fixation du **Couvercle de la lampe** à l'arrière du projecteur jusqu'à ce qu'elles tournent librement, puis retirer le **Couvercle de la lampe**.

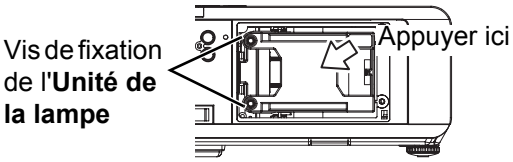
2. Dévisser les 2 vis de fixation de l'**Unité de la lampe** à l'aide du tournevis cruciforme.
3. Tenir l'**Unité de la lampe** par la poignée puis débloquer le verrou de la lampe.
4. Extraire doucement l'**Unité de la lampe** du projecteur.



5. Remettre la nouvelle **Unité de la lampe** à son emplacement.



6. Appuyer sur l'**Unité de la lampe** jusqu'à ce qu'elle s'encliquète et s'assurer qu'elle soit bien fixée en place.
7. Resserrer les 2 vis de fixation de l'**Unité de la lampe** à l'aide du tournevis cruciforme.



8. Fixer le **Couvercle de la lampe** puis resserrer les 2 vis du **Couvercle de la lampe** à l'aide du tournevis cruciforme.

Protections du support de montage au plafond

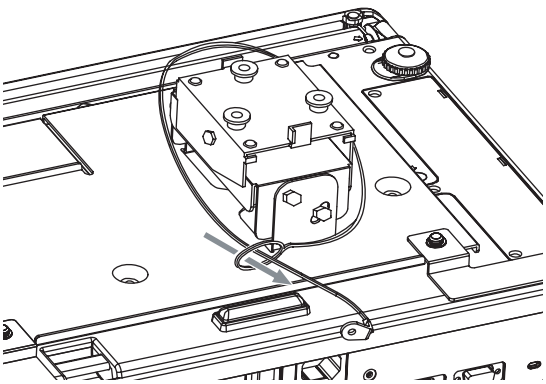
Bien que le projecteur ainsi que le support d'installation au plafond aient été conçus pour répondre aux plus hauts critères de sécurité, il est néanmoins recommandé d'installer et d'attacher au bas du projecteur le câble de sécurité fourni, en cas d'installation au plafond, afin de garantir une sécurité optimale.

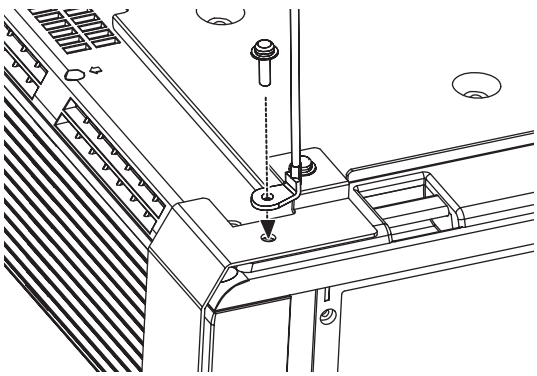
REMARQUE:

- Pendant toute la durée de la garantie, le fabricant ne pourrait en aucun cas, être tenu pour responsable de tout danger ou dommages causés soit par l'utilisation d'un support au plafond non conforme, acheté auprès de distributeurs non autorisés, soit par ses conditions d'utilisation.
- N'utiliser qu'un tournevis dynamométrique durant l'installation, et ne jamais utiliser un tournevis électrique ou un tournevis à frapper.
- Les travaux d'installation du support au plafond ne devront être effectués que par un technicien qualifié.
- Démonter au plus vite tout support au plafond qui ne sera plus utilisé.

■ Installation du câble de sécurité

1. Installer le support de montage au plafond en suivant les consignes d'installation.
2. Faire passer la boucle du câble de sécurité autour du support de montage au plafond avec moins de jeu.
   - Attacher une des extrémités du câble à l'aide d'un verrou en le bouclant par l'autre extrémité.
3. Fixer le verrou au bas du projecteur à l'aide de la vis fournie.
   - Couple: 125±20 CN·m





*Ceci vaut pour le ET-PKX100S.

NOTE:
This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material - special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate.

Panasonic®

Projectors

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